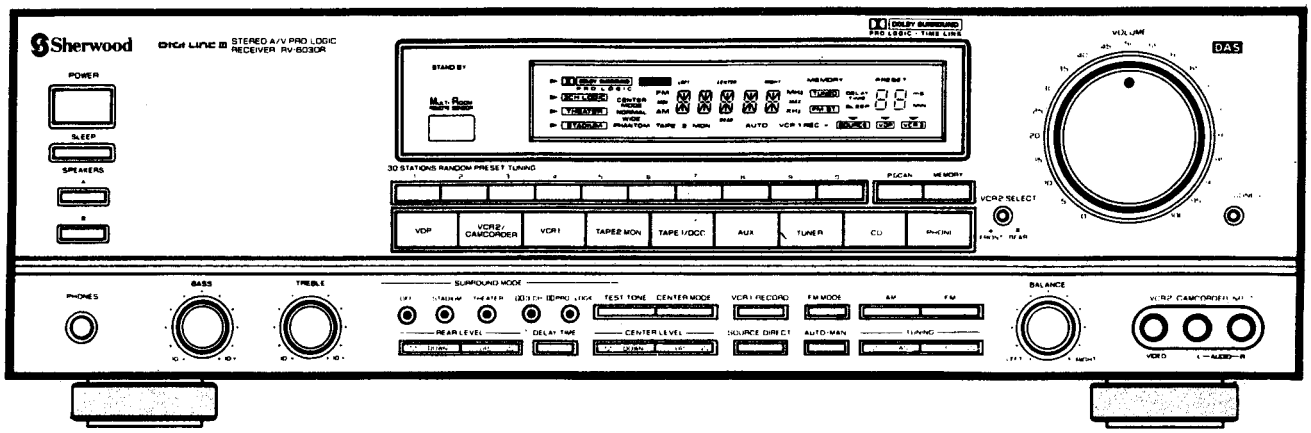
SERVICE MANUAL

RV-6030R

STEREO A/V PROLOGIC RECEIVER



CONTENS

Safety Precautions 2
Specifications 3
Circuit Description 6
Aligment Procedures 11
Block Diagram 15
Wiring Diagram 17
Troubleshooting 19
Mechanical Parts List 23
Exploded Views 25
Printed Circuit Boards 29
Electrical Parts List 35
Semiconductor Lead Identification & Internal Diagram 43
Schematic Diagrams 50

Sherwood

SAFETY PRECAUTIONS

WARNING

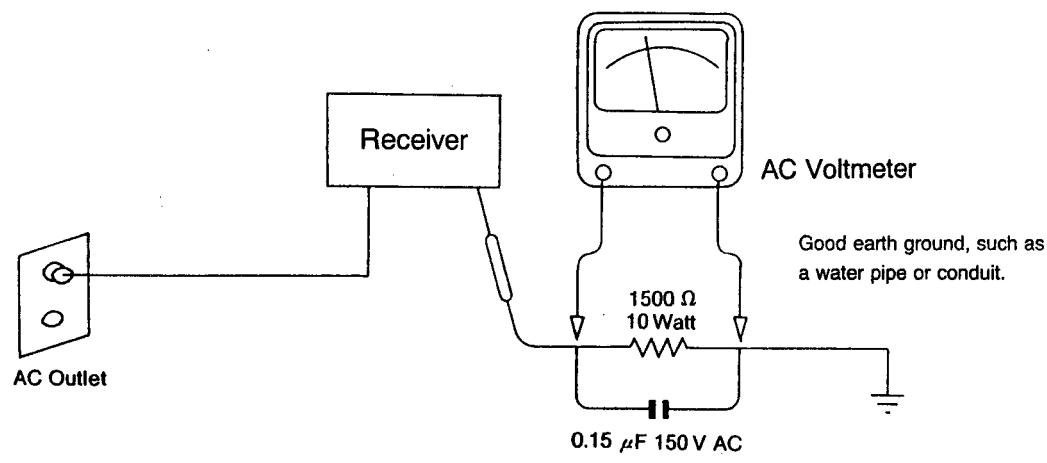
Before servicing this unit, familiarize yourself with the following precautions:

1. Many electrical and mechanical parts in this chassis have special safety characteristics that often pass unnoticed and the protection afforded by them cannot necessarily be obtained by using replacement components rated for higher voltage, wattage, etc. Replacement parts that have these special safety characteristics are identified in this manual and its supplements; electrical components having such features are identified by ⚠ in the schematic diagram and the parts list.

   Before replacing any of these components, read the parts list in this manual carefully. The use of substitute replacement parts that do not have the same safety characteristics as specified in the parts list may create shock, fire, or other hazards.

2. Before returning the set to the customer, always do an AC leakage current check on the exposed metal parts of the cabinet, such as terminals, screw heads, and metal overlays, to be sure the set is safe to operate danger of electrical shock.
   Plug the AC line cord directly into a 120 V AC outlet **(120 V AC version only).** (Do not use a line isolation transformer during this check.)
   Be sure your AC voltmeter has a sensitivity of 5000 Ω per volt or greater. Then connect a 1500 Ω 10 watt resistor, paralleled by a 0.15 μF 150 V AC capacitor, between a known good earth ground (such as a water pipe, or conduit) and the exposed metalic is parts, one at a time. Measure the AC voltage across the combination of a 1500 Ω resistor and a 0.15 μF capacitor. Reverse the AC plug at the AC outlet and repeat AC voltage measurements for each exposed metalic part. Voltage measured must not exceed 0.75 V RMS. This corresponds to 0.2 mA AC. Any value exceeding this limit constitutes a potential shock hazard and must be corrected immediately.

At 5000 Ω per volt or greater sensitivity,
the reading should not exceed 0.75 V.



Place the probe on each exposed metalic part.

SPECIFICATIONS

Audio Section-Front		Unit	Nominal	Limit
Minimum output power at distortion below 0.05% 20 Hz - 20 kHz both channels driven at 8 Ω	USA/Canada	W	103	100
Din power at distortion below 1% 1 kHz both channels driven at 8 Ω	Europe	W	115	110
Inter-modulation distortion at 100 W output 60 Hz : 7 kHz=4: 1 SMPTE both channels driven at 8 Ω		%	0.04	0.05
Harmonic distortion at 100 W output:				
	20 Hz	%	0.04	0.05
	1 kHz	%	0.04	0.05
	20 kHz	%	0.04	0.05
Frequency response at CD/TAPE 8 Ω load, 1 W output -3 dB		Hz	10 - 60 k	20 - 50 k
Input sensitivity at 100 W output 1 kHz:				
	PHONO	mV	2.5	2.5±3
	CD / TAPE	mV	150	150±30
Tone control:				
	BASS, 100 Hz	dB	±10	±10 ±2
	TREBLE, 10 kHz	dB	±10	±10 ±2
Phono amp overload at 0.5% THD, 1 kHz		mV	140	120
Loudness compensation at -30 dB volume:				
	100 Hz	dB	+6	+6±2
	10 kHz	dB	+3	+3±2
Channel separation at CD/TAPE:				
	100 Hz	dB	50	40
	1 kHz	dB	50	40
	10 kHz	dB	45	35
Signal to noise ratio(WTD/UNWTD):				
	PHONO	dB	70 / 66	69 / 65
	CD/TAPE	dB	92 / 86	90 / 84
Crosstalk at 1 kHz:				
	PHONO ⇒ CD	dB	67	63
	CD ⇒ PHONO	dB	67	63
Phono RIAA REC output at 30 Hz-15 kHz		dB	1	±1.5

Audio Section-Center		Unit	Nominal	Limit
RMS output power at distortion below 0.05% 1 kHz, 8Ω		W	68	65
Signal to Noise ratio(WTD/UNWTD): with IHF "A" -line input level 220 mV		dB	78 / 75	73 / 70
Frequency response 8 Ω load, 1 watt output at -3 dB (Dolby prologic):	Normal	Hz	110~17 k	120~15 k
	Wide	Hz	40 - 18 k	50 - 15 k

Audio Section-Rear	Unit	Nominal	Limit
RMS output power at distortion below 0.7% 1 kHz both channels driven at 8 Ω	W	22	20
Signal to noise ratio (WTD/UNWTD): wtih IHF "A" (DOLBY, STADIUM, THEATER) - line input level 220 mV at 1 kHz, Delay time 20 ms	dB	65 / 60	63 / 58
Frequency response 8 Ω load, 1 W output at ±3 dB (Dolby prologic)	Hz	80 - 7 k	100 - 6 k

Video Section	Unit	Nominal	Limit
Input sensitivity at 1 Vp-p output, 75 Ω	dB	±0	±0.5
Output level at 1 Vp-p output, 75 Ω			
VCR1, REC OUT, MONITOR	dB	±0	±0.5
Frequency response 75 Ω load at - 3 dB	MHz	10	5 - 6
Signal to noise ratio	dB	50	45

FM Section		Unit	Nominal	Limit
Tuning coverage:				
	USA/Canada	MHz	87.5 - 107.9	
	Europe	MHz	87.5 - 108	
Usable sensitivity:				
at 3 % THD	USA/Canada	dBf	13.2	16.2
at 26 dB S/N	Europe	dBf	15.2	17.2
50 dB quieting sensitivity:				
MONO	USA/Canada	dBf	17.2	21.2
	Europe	dBf	19.2	23.2
STEREO	USA/Canada	dBf	41.2	43.2
	Europe	dBf	42.2	44.2
Total harmonic distortion at 1 kHz:				
	MONO	%	0.3	0.5
	STEREO	%	0.5	0.8
Signal to noise ratio at 65 dBf:				
	MONO	dB	70	68
	STEREO	dB	70	66
De-emphasis at 30 - 1500 Hz		dB	- 1.5	-2
(USA/Canada: 75 µsec, Europe: 50 µsec)				
Output voltage		mV	±600	±100
Spurious response at 98 MHz		dB	70	60
Capture ratio:	USA/Canada	dB	1.5	2
	Europe	dB	2.5	3
Alternate channel selectivity at 45 dBf ±400 kHz:				
	USA/Canada	dB	55	45
	Europe	dB	75	65
Muting threshold at 98 MHz		dBf	28	±5
Search level at 98 MHz		dBf	28	±5
Stereo separation at 65 dBf:				
	100 Hz	dB	40	35
	1 kHz	dB	45	40
	10 kHz	dB	35	30
Image rejection:				
	USA/Canada	dB	40	35
	Europe	dB	80	70
IF rejection		dB	110	100
AM rejection ratio at 45 dBf		dB	60	50

AM Section		Unit	Nominal	Limit
Tuning coverage:				
	USA/Canada	kHz	530 - 1710	
	Europe	kHz	522 - 1611	
Usable sensitivity 1000 kHz, 999 kHz		dB/m	54	57
Image rejection at 1400 kHz		dB	33	28
Total harmonic distortion at 80 dB/m		%	0.5	1.2
Output voltage at 80 dB/m		mV	200	±50
Selectivity at ±9 kHz, ±10 kHz		dB	25	20
Signal to noise ratio at 80 dB/m input		dB	45	40
Search level		dB/m	60	±5
IF rejection ratio at 600 kHz		dB	60	50

General	
Speaker load impedance	8 Ω
Power consumption	500 W
Dimensions(H × W × D)	440 × 140 × 380 mm
Weight	13 kg

Power requirements :

A : 120 V 60 Hz for American/Canadian version
B : 120/220 V, 60/50 Hz for multy voltage version(switchable)
D : 230 V 50 Hz for German Gereral European version
E : 240 V 50 Hz for UK/Australia version
G : 220 V 50 Hz for Other Area

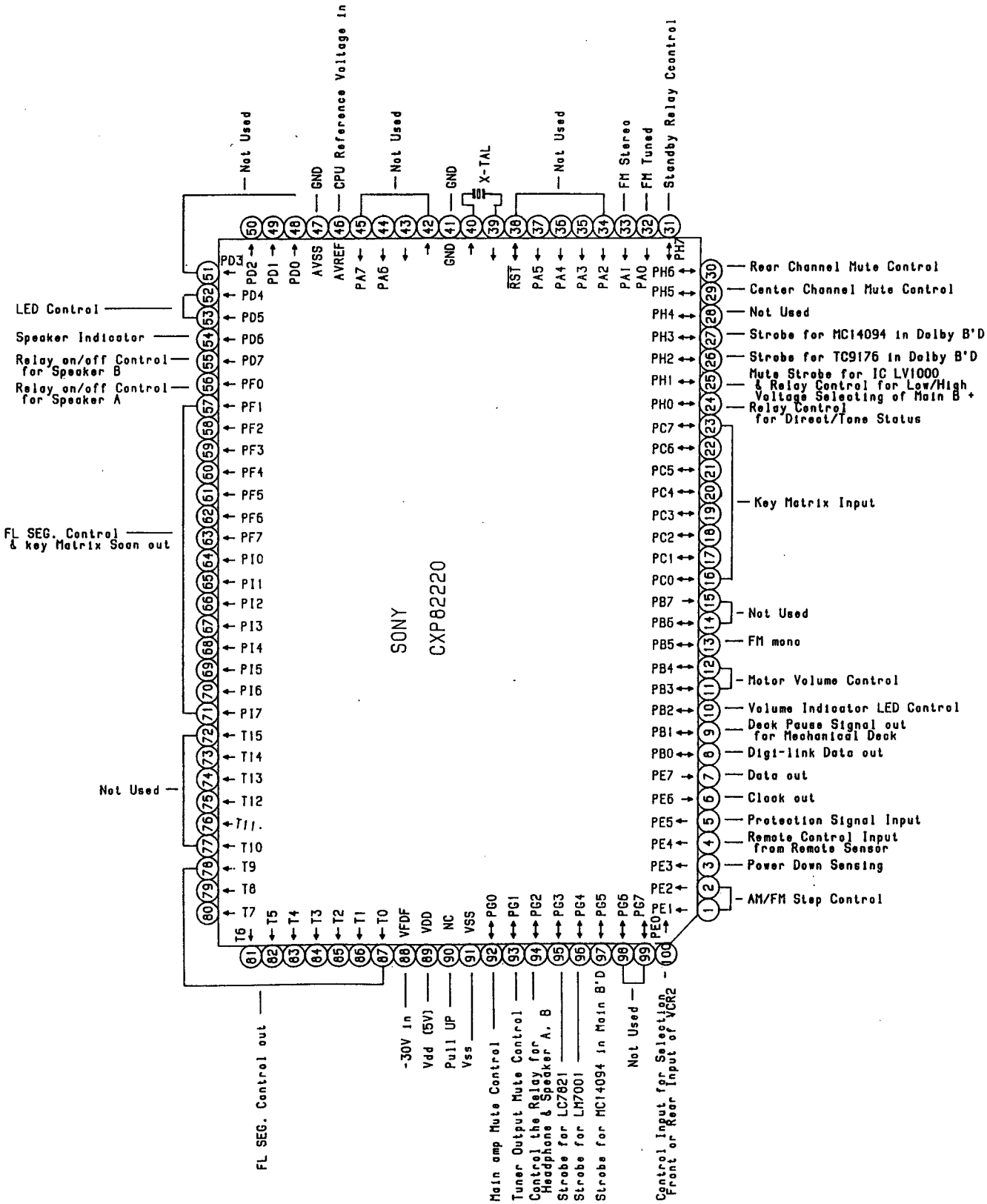
Note :

1. Nominal specs represent the design specs. All units should be able to approximate these-some will exceed and some may drop slightly below these specs. Limit specs represent the absolute worst condition that still might be considered acceptable: in no case should a unit fail to meet limit specs.
2. This manual is based on the American (A) standard, and provides information on regional circuit modification through the use of alternate schematic diagrams or wiring diagrams, and information on regional component variations through the use of parts lists. Design and specifications subject to change without notice.

CIRCUIT DESCRIPTION

CPU (IC701): CXP82220

1. Pin Connection Diagram

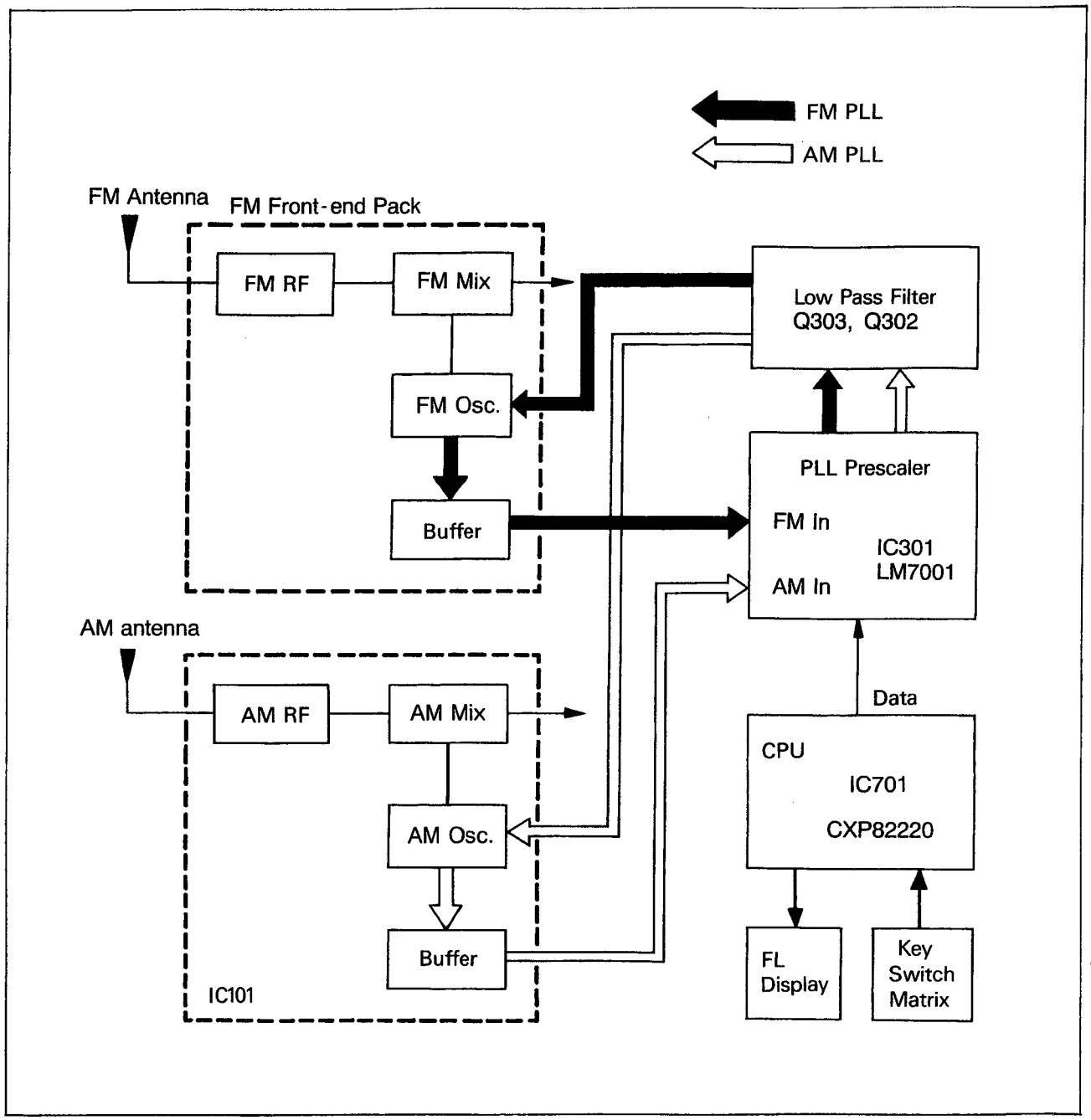


2. Pin Functions

Pin Names	Input/Output	Functions		
PA0/AN0 to PA7/AN7	I/O/Analog input	(Port A) 8-bit I/O port. Each bit can be individually specified as input or output. (8 pins)	A/D converter analog input pins.	
PB0/CINT	I/O/Input	(Port B) 8-bit I/O port. The low 7 bits can be individually specified as input or output. The most significant bie (PB7) is output only. (8 pins)	16-bit timer/counter external capture input pin.	
PB1/CS0	I/O/Input		Serial interface (CH0) chip select input pin.	
PB2/SCK0	I/O/I/O		Serial clock (CH0) I/O pin.	
PB3/SI0	I/O/Input		Serial data (CH0) input pin.	
PB4/SO0	I/O/Output		Serial data (CH0) I/O pin.	
PB5/SCK1	I/O/I/O		Serial data (CH1) I/O pin.	
PB6/SI1	I/O/Input		Serial data (CH1) input pin.	
PB7/SO1	Output/Output		Serial data (CH1) output pin.	
PC0/KR0 to PC7/KR7	I/O/Input	(Port C) 8-bit I/O port. Each bit can be individually specified as input or output. Each can drive a 12 mA sink current. (8 pins)	Key return input pins for performing key scans with the FDP segment signals.	
PD0/S0 to PD7/S7	Output/Output	(Port D) 8-bit output port. (8 pins)	FDP segment signal output pins.	
PE0/INT0/ECO	Input/Input/Input	(Port E) 8-bit input/output port. The low 6 bit saie inputs, and the high 2 bits are outputs. (8 pins).	External interrupt request input pins. (4 pins).	Timer/counter external event input pins. (2 pins).
PE1/INT1/EC1	Input/Input/Input			
PE2/INT2	Input/Input			
PE3/INT3/NMI	Input/Input/Input			Non-maskable interrupt request input pin.
PE4/RMC	Input/Input		Remote control unit receive circuit input pin.	
PE5/CTL	Input/Input		CTL duty detection circuit input pin.	
PE6/PWM	Output/Output		14-bit PWM output pin.	

Pin Names	Input/Output	Functions		
PE7/TO/DDO/ADJ	Output/Output Output/Output		16-bit timer/counter square wave output pin, CTL duty detection output pin, and pin for frequency division output of 32-kHz oscillator.	
PF0/S8 to PF7/S15	Output/Output	(Port F) 8-bit output port. (8 pins)		FDP segment signal output pins.
PG0/PTO0 to PG3/RTO3	I/O/Output	(Port G) 8-bit I/O port. Each bit can be individually specified as input or output. The lower four bits are output logically ORed with the RTO contents. (8 pins)	Realtime pulse generator (RTG) outputs. These function as high-precision realtime pulse output ports. (4 pins)	
PG4 to PG7	I/O			
PH0 to PH7	I/O	(Port H) 8-bit I/O port. Each bit can be individually specified as input or output. (8 pins)		
PI0/S16 to PI7/S23	Output/Output	(Port1) 8-bit output port. (8 pins)	FDP segment signal output pins.	
T8/S31 to T15/S24	Output/Output	Dual-use output pins for FDP timing signals and FDP segment signals.		
T0 to T7	Output	FDP timing signal output pins		
V_{FDP}		FDP voltage supply pin if and internal resistor was specified with a mask option.		
EXTAL	Input	Crystal interface pins for system clock oscillation. If the clock is supplied externally then it should be input to the EXTAL pin. The XTAL pin should then be left open.		
XTAL	Output			
TEX	Input	Crystal interface pins for the 32-kHz timer/counter's clock oscillator. A 32-kHz liquid crystal oscillator is placed between TEX and TX. When used as an event input, connect the signal source to TEX, and leave TX open.		
TX	Output			
RST	I/O	System reset pin, active when "L"		
NC		This pin should be connected to V_{DD} during operation.		
AV_{REF}	Input	A/D converter reference voltage input pin.		
AV_{SS}		A/D converter ground pin.		
V_{DD}		Positive power supply pin.		
V_{SS}		GND pin.		

DIGITAL TUNING SYSTEM DESCRIPTION



CONTROL KEY AND MODE SWITCH MATRIX

Searching for Station

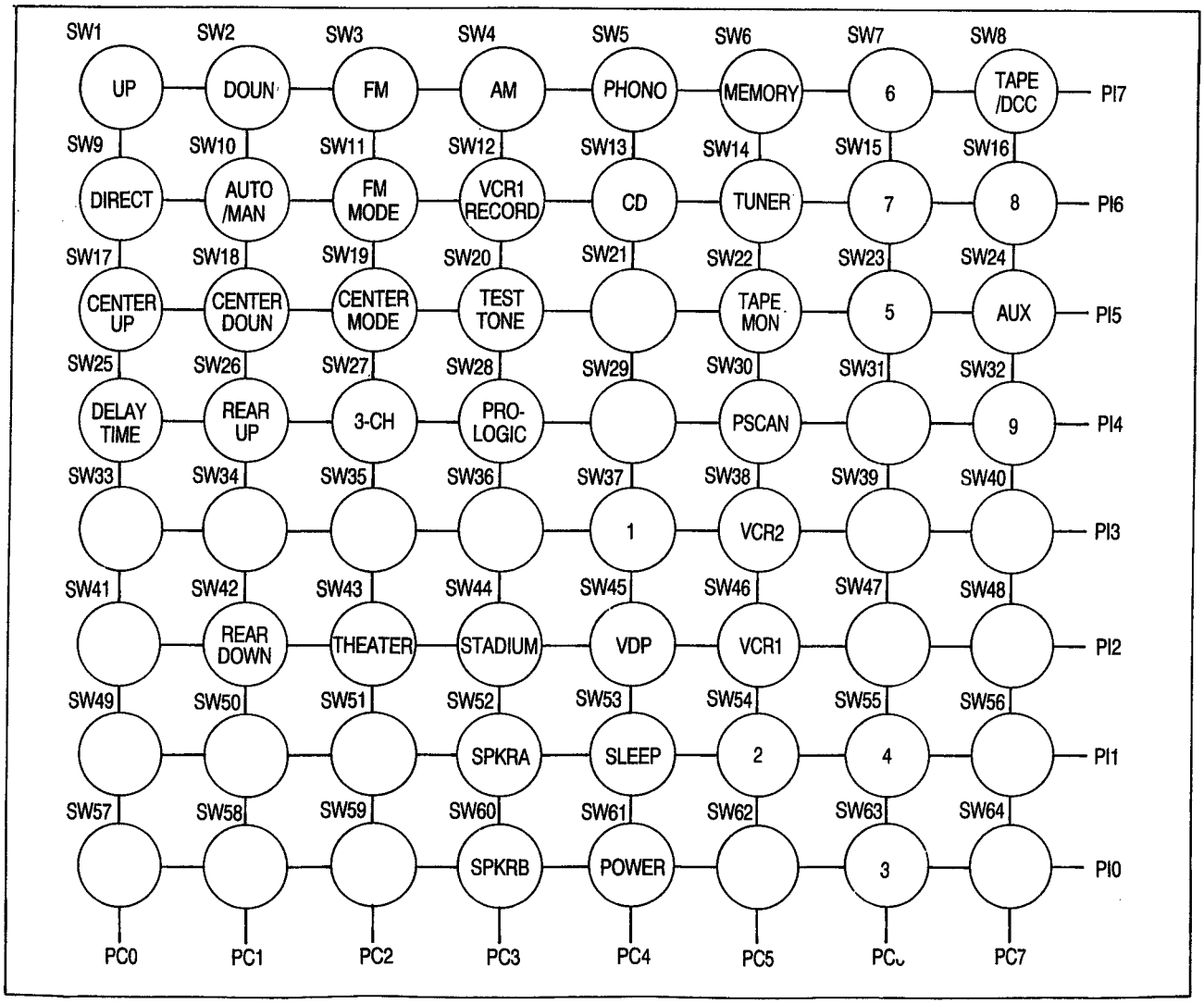
Automatic Tuning

Press the AUTO SEARCH key for automatic tuning
Pressing the TUNE △ or TUNE ▽ key causes automatic up or down searching for a station until a station is received.

Manual Tuning
By pressing the TUNE △ or TUNE ▽ key, the frequency is changed by a step. If the key is kept pressing scanning is continued until the key is released.

Memory
The tuning information is stored into an internal RAM by pressing the MEMORY key and then pressing one of 30 preset locations while the memory indicator 'MEMORY' blinks.
If no key is pressed while the indicator blinks, the memory function is canceled.

M1 to M10
Thirty AM and FM stations can be recalled from internal RAM. When it is switched from one band to the other band, the tuner tunes to the station last tuned on that band. Each time a station is changed, the controller provides a signal to mute the tuner.


SW1 SW2 SW3 SW4 SW5 SW6 SW7 SW8
UP DOUN FM AM PHONO MEMORY 6 TAPE /DCC PI7
SW9 SW10 SW11 SW12 SW13 SW14 SW15 SW16
DIRECT AUTO /MAN FM MODE VCR1 RECORD CD TUNER 7 8 PI6
SW17 SW18 SW19 SW20 SW21 SW22 SW23 SW24
CENTER UP CENTER DOUN CENTER MODE TEST TONE TAPE MON 5 AUX PI5
SW25 SW26 SW27 SW28 SW29 SW30 SW31 SW32
DELAY TIME REAR UP 3-CH PRO-LOGIC PSCAN 9 PI4
SW33 SW34 SW35 SW36 SW37 SW38 SW39 SW40
1 VCR2 PI3
SW41 SW42 SW43 SW44 SW45 SW46 SW47 SW48
REAR DOWN THEATER STADIUM VDP VCR1 PI2
SW49 SW50 SW51 SW52 SW53 SW54 SW55 SW56
SPKRA SLEEP 2 4 PI1
SW57 SW58 SW59 SW60 SW61 SW62 SW63 SW64
SPKRB POWER 3 PI0
PC0 PC1 PC2 PC3 PC4 PC5 PC6 PC7

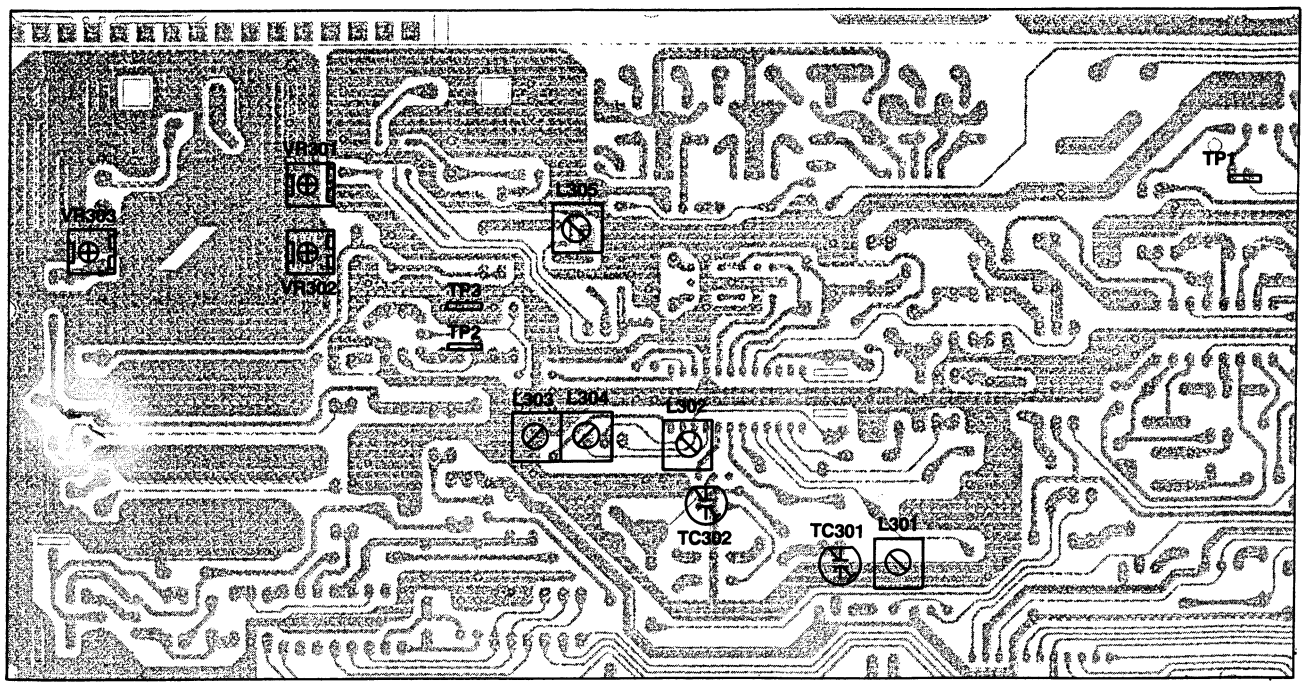
ALIGNMENT PROCEDURES

Equipment Required

- AM signal generator
- Oscilloscope
- AC voltmeter
- FM signal generator
- Stereo modulator
- Audio generator
- Distortion meter
- DC voltmeter
- Frequency counter

Note : Remove line cord antenna from FM external antenna terminal when aligning.
Before making adjustment operate the appliance for more than 2 minutes.

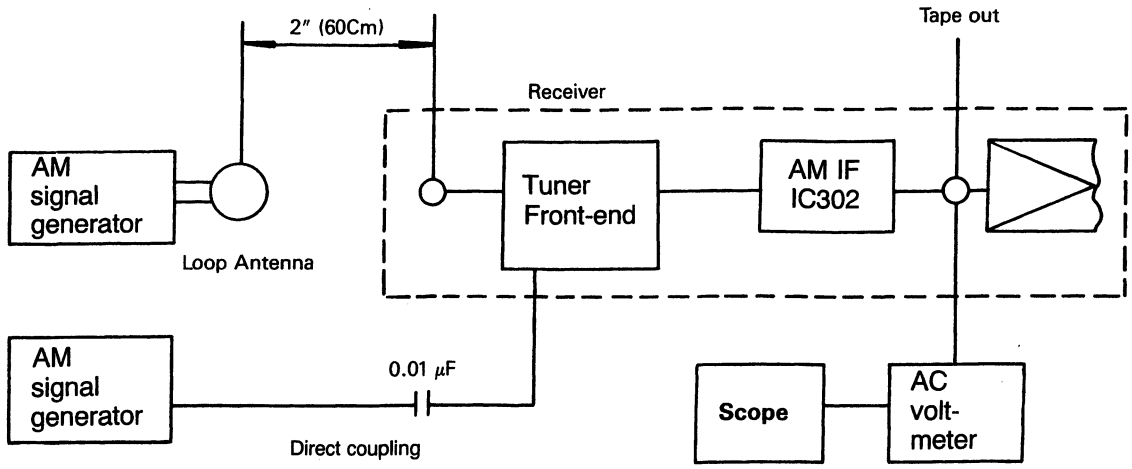
Test Points (Tuner Board)



1. AM Adjustment

- Selector SW. ——Tuner, AM
- In case of 2 band appliance (AM/FM).

No.	Subject	Feed Signal From	Feed Signal To	Setting Appliance	Measure Output	Adujst Point	Adjust For	Remark
1.	Tuning Voltage	520 kHz		*1) 520 kHz	Connect DVM to TP1	L302	DC 1.2±0.2 V	
		1710 kHz		*2) 1710 kHz		TC302	DC 0.9±0.2 V	1611 kHz (8.6±0.2 V)
		• Repeat the step *1) and *2) until DVM reads the tuning voltage mentioned above. • In case the freq. is 9 kHz, the freq. of AM SG and appliance should be changed to *1) 522 kHz *2)1611 kHz.						
2.	IF	AM IF Genescope	ANT.		Connect IF genescope	L305 (IFT)	Symmetrical curve on AM IF genescope	
3.	RF Turning	*1) AM SG. 600 kHz, 74 dB 400 Hz (30% Mod.)	ANT.	600 kHz	Output connect AC voltmeter & oscilloscope	L301	Maximize audio output	AM SG. Test loop, ANT. 60cm appliance
		*2) AM SG. 1400 kHz, 74 dB 400 Hz (30% Mod.)	ANT.	1400 kHz		TC301		
		• Feed signal should be fed to loop ant. through the TEST loop ant., 60cm distant from the appliance. • Repeat the step *1) & *2) until no further improvement occurs. • In case the freq. is 9 kHz, the freq. of AM SG. and appliance should be changed to *1) 603 kHz *2) 1404 kHz						
4.	Tuned Level	AM SG 1000 kHz, 80 dB 400 Hz(30% Mod.)	ANT.	1000 kHz		VR301	Tuned light on	In FL display
	• In case the freq. step is 9 kHz, the freqy. of AM SG and appliance should be changed to 999 kHz.							
5.	Tuning (Stereo)	FM SG 98.10 MHz, 60 dB 1 kHz (75 kHz Dev.) Pilot 19 kHz (9% Mod.)	ANT.	98.10 MHz Stereo	Output connect AC voltmeter & distortion	Front-end	Minimize distortion	
6.	Mute Level	FM SG 98.10 MHz, 10 μV (5 μV for Europe) 1 kHz(75 kHz Dev.) (40 kHz dev. for Europe)	ANT.	98.10 MHz Stereo	Output connect oscilloscope	VR302	Muting occurs marginally	
7.	Separat-ion	*1) FM SG. 98.10 MHz, 60 dB 1 kHz (75 kHz, Dev.) Pilot 19 kHz (9% Mod.) (L ch.→R ch.)	ANT.	98.10 MHz Stereo	R ch. Mod. connect AC voltmeter & distortion analyzer and oscilloscope	VR303	Minimize output	L ch. mode
		*2) Same as above (R ch.→L ch.)			L ch. Mod. connect same as above		Minimize output	R ch. mode
		• Repeat the step *1) and *2) until no further improvement occurs.						

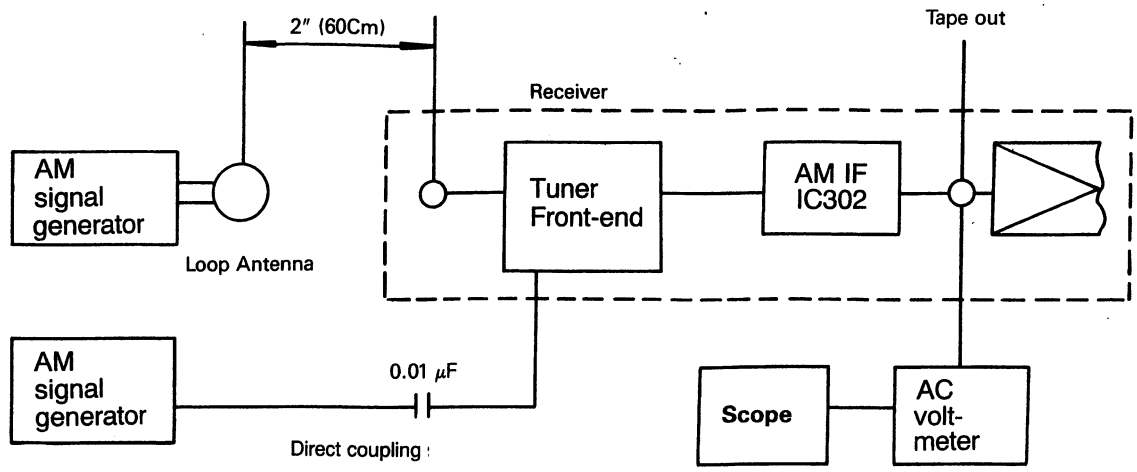


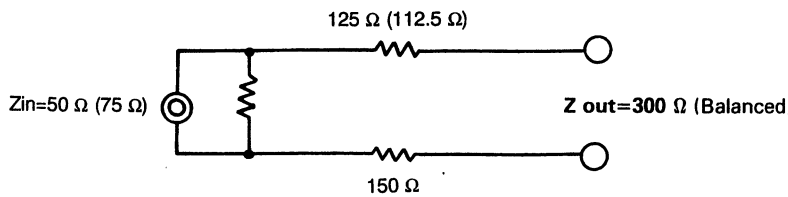
AM Alignment Connection

2. FM Adjustment

- Selector SW. ——— TUNER, FM (Mono/Stereo)
- Deviation ——— USA/Canada (75 kHz Dev.)
  Europe (40 kHz Dev.)

No.	Subject	Feed Signal		Setting Appliance	Measure Output	Adujst Point	Adjust For	Remark
		From	To					
1.	Tuning Voltage	87.5 MHz	107.9 MHz	87.50 MHz	Connect DVM to TP1		DC 1.2±0.2 V	
				107.90 MHz			DC 8.8±0.2 V	
2.	IF	FM IF genescope	ANT.	98.1 MHz 60 dB	TP2 & TP3 connect IF genescope	L303	Symmetrical curve on FM IF genescope	
					TP2 & TP3 connect DVM		DC 0±50 mV	
				Detune	Connect oscilloscope	L303	Maximize noise output	In case IF genescope is not available
					TP2 & TP3 connect DVM		DC 0±50 mV	
3.	THD (Mono)	FM SG. 98.1 MHz, 60 dB 1 kHz (75 kHz Dev.)	AMT.	98.10 MHz Mono	*1) Output connect DVM	L304	DC 0±0.05 V	
					*2) Output connect AC voltmeter & distortion analyzer		Minimize distortion	
		• Adjust the step *1) 1st and the step *2) next and repeat until no further improvement occurs.						



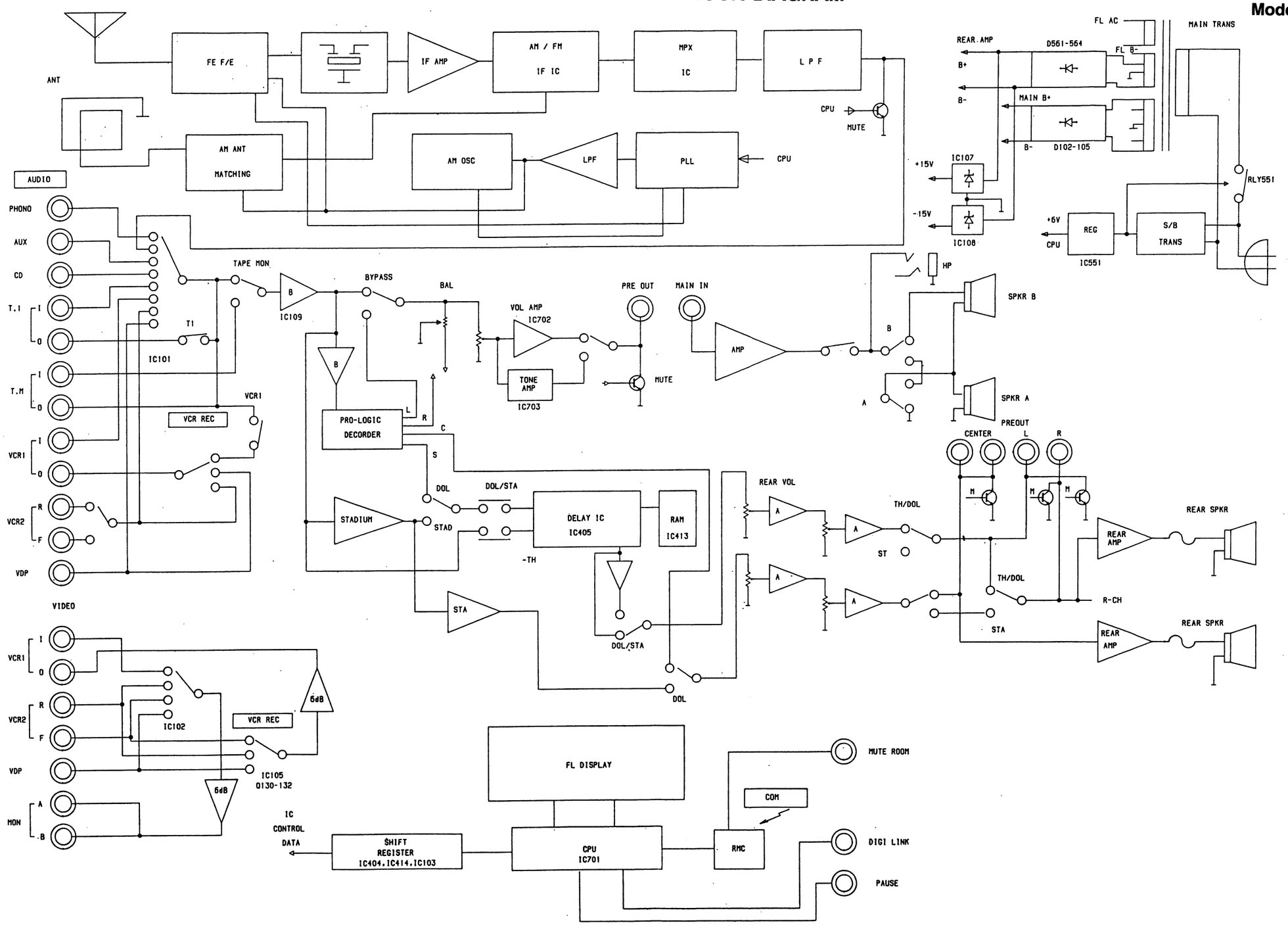


FM Dummy Antenna to 300 Ω Antenna terminal of receiver

FM Dummy Antenna

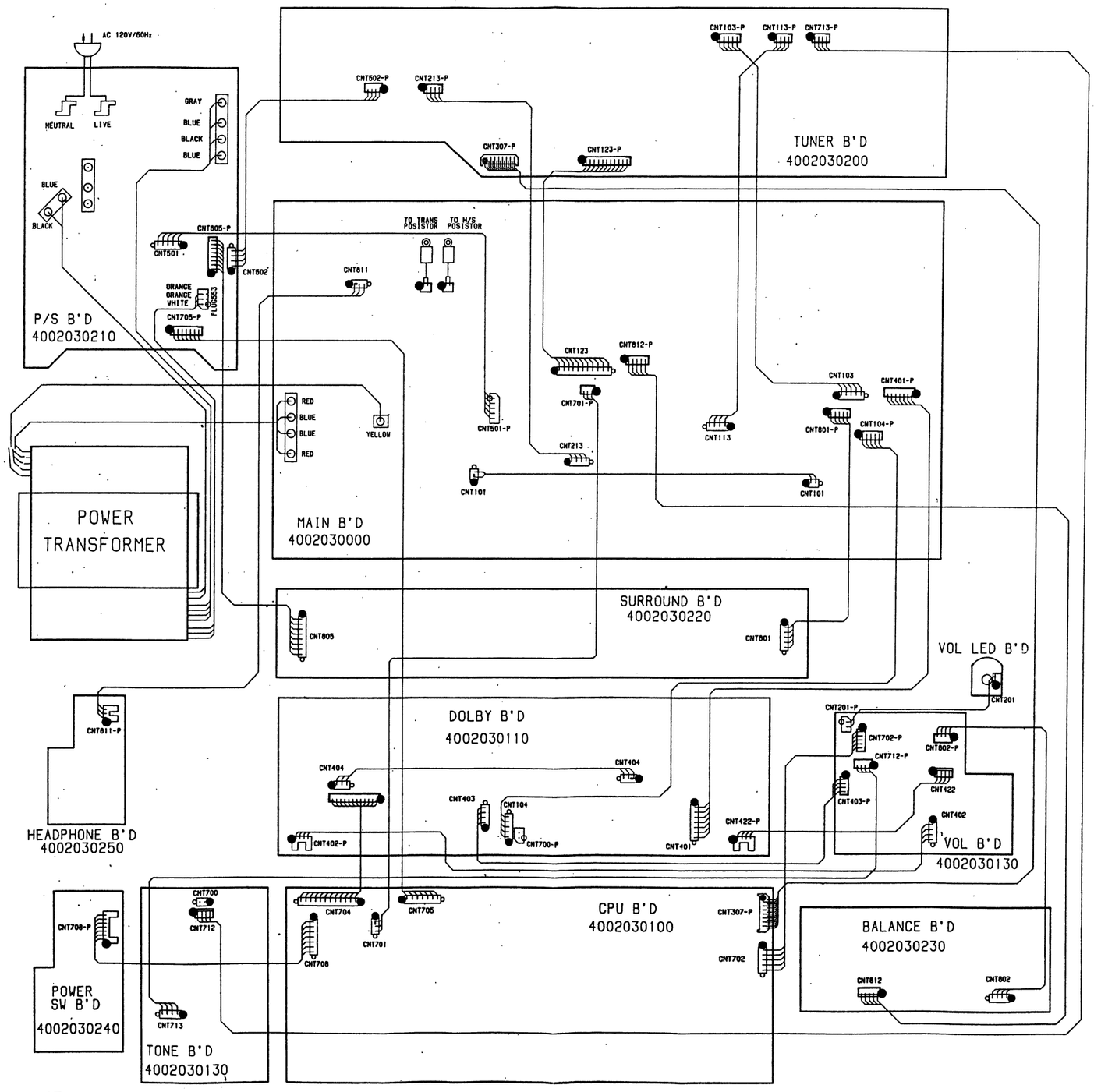
BLOCK DIAGRAM

Model No.: RV - 6030R



WIRING DIAGRAM

Model No.: RV - 6030R



17

18

TROUBLESHOOTING

Symptom	Cause and Remedy
Receiver inoperative. (FL indicator does not light)	• Faulty AC power cord. Replace. • Defect in the power switch. Replace. • Broken wire in the power transformer. Replace the power transformer.
Protection Operation.	• Defective power transformer. Replace. • Short in B^+ (15V) line. Repair the short circuit. • Protection circuit defective in Q116 L/R, Q117, Q118 Replace the component(s). • Poor contact in CNT307-P (Tuner, CPU) CNT 402P(Dolby), CNT422-P(Dolby) Retry connect. • Blown out fuse F551, F552, F553. Replace the Defective component(s). • Defective in RLY551. Replace. • CPU protection port damaged. Replace.
Fuse blows when power is turned on.	• Defective power transformer. Replace. • Short in the primary or secondary of the transformer circuitry. Repair the short. • Damaged rectifier D102 to D105 Replace the defective component(s). • Short circuit in the rectifier circuit. Repair the short.
Power indicator lights but no sound from both channels.	• Speaker relay A or B defective. Replace the defective relay(s). • Defect in transistor Q114 L/R, Q115 L/R on the Main Amp Board. Replace the defective component(s).
Speaker A inoperative.	• Speaker relay A defective. Replace.
Speaker B inoperative.	• Speaker relay B defective. Replace.
One channel does not work when VOLUME is at maximum with a test signal applied to the CNT113-P of the dead channel.	• Defect in transistor Q114 L/R, Q115 L/R on the Main Amp Board. Locate and correct the defect. • Break in copper foil of printed circuit board. Repair. • Short in speaker output terminal. Repair or replace.
Speaker works normally but headphones inoperative.	• Headphone plug does not mate with jack. Replace the plug. • Poor contact in CNT811-P in H/P B'D. Retry connect.

Symptom	Cause and Remedy
PHONO input inoperative.	• Poor contact in phono input jack. Repair or replace the jack. • Defective phono switch or IC110. Replace.
LOUDNESS has no effect.	• Defective loudness switch. Replace. • Defective resistor R601, R602, R03, R604, C601, C602, C603, C606. Replace the defective components(s).
FM inoperative.	• Defective front-end.(FE306-A15) Replace. • Defective FM switch. Replace the switch.
FM inoperative.	• Defective transistor Q301, Q307, Q308 L/R, IC302, IC303. Replace the defective transistor(s) or IC(s). • Defective coil L303 or L304. Replace the coil(s). • Defective lead-in. Repair or replace the lead-in. • Ceramic filter CF1, CF2 defective. Replace the defective ceramic filter(s). • Defective controller circuit component. Replace.
Poor multiplex separation.	• Improper adjustment. Readjust VR303. (Refer to MPX Alignment.) • IC303 defective. Replace. • Variable resistor VR303 defective. Replace the variable resistor(s).
STEREO indicator does not light.	• Defective indicator in FL. Replace. • Improper adjustment of VR303 of tuner board. Make readjustment. • Defective IC303. Replace the defective component.
FM volume not sufficient.	• If volume from both L and R channels is not loud enough: Front-end section defective. Faulty IC302, Coil L303. Defective C314 of tuner board. If sound of one channel is not loud enough. Defective L306 L, L306 R.
FM MONO has no effect.	• Defective FM mode switch. Replace.
AM inoperative.	• Damaged IC302 of tuner board. Replace. • Defective L301, L302, T305 or CF4 of tunr board. Replace the defective component(s). • Resistor R318, R326 defective.

Symptom	Cause and Remedy
AM inoperative.	Replace the defective component(s). • Capacitor C836, C818, C813 defective. Replace the defective capacitor(s). • Defective AM switch. Replace. • Defective varicap diode VD1, VD2. Replace varicap diods(s). • Damaged AM loop antenna. Repair or replace. • Defective controller circuit component. Replace.
BASS control has no effect.	• Variable resistor BASS defective. Replace. • Defective R720-722, R725, C707, C717, C711, C714. Replace the defective component(s).
TREBLE control has no effect.	• Variable resistor VR201 defective. Replace the defective component(s).
AUTO tune inoperative.(UP/DOWN)	• Poor contact in Up/Down key. Repair replace. • Defective IC701. Replace. • Defective FL701. Replace. • Defective tuner circuit component. Replace. • In case of FM only, improper adjustment of FM front-end. Replace.
MANUAL tune inoperative.(UP/DOWN) (AM or FM)	• Poor contact in Up/Down key. Replace. • Defective IC701. Replace.
MEMORY setting(keys 1-10)inoperative.	• Poor contact in memory keys 1-10. Replace. • Poor contact in memory set key. Replace. • Defective IC701. Replace the defective component.
FL inoperative.	• FL defective. Replace. • Defective IC701. Replace. • Defective X701. Replace.
Noise in VOLUME control.	• Defective IC251. Replace. • Defective capacitor C254 or C255. Replace the defective capacitor(s).
Remote control unit inoperative.	• Weak Battery. Replace. • Defective. Replace. • Defective IC701 or RMC sensor. Replace.

Notes

MECHANICAL PARTS LIST

CABINET & CHASSIS

Ref. No.	Part No.	Description	Q'ty	Version
PACKGE				
	9722030910	Cushion Ploy	1	
	9715000510	Film Soft PE	1	
	049605196101	Box Carton	1	
	9705005310	Poly Bag	1	
ACCESSORIES				
	4348001010	ANT Wire (FM)	1	
	9007017230	Manual INST	1	
	2608207360	Antenna AM Loop Stand-Type	1	
	054005100088	Ass'y Commander	1	
CABINET				
1	046122022611	Cover Top, Black	1	
2	6122632110	Frame L	1	
3	046033102511	Foot H/Stamp, Gold	2	
	046033102611	Foot, Al.	2	Dom
4	046033102511	Foot H/Stamp, Gold	2	Dom,C,D,E,F
	046033102510	Foot, Black	2	A,B
5	6715015520	Sponge, Black	1	
6	6122632210	Frame R	1	
7	6122212120	Chassis Front	1	
8	6122418610	Cover Bottom	1	
9	048602018313	Panel Front, Black	1	
	048602018314	Panel Front, Black	1	Dom
10	048535033911	Badge Sherwood, Gold	1	
	048535034011	Badge Inkel, Gold	1	Dom
11	8521007910	Body Front, Black	1	
12	8545074330	Button Power, Black	1	
13	6555004380	Spring Button	1	
14	8545082110	Button Sleep, Black	1	
15	8555038710	Indicator	2	
16	048545089711	Button Speaker A, Black	1	
17	048545089712	Button Speaker B, Black	1	
18	8543040910	Button Preset, 12Key Black	1	
19	048543040813	Button Function, ABS Black	1	
	048543040814	Button Function, ABS Black	1	Dom
20	048555036411	Window Display, P.V.C 3t	1	A
	048555036412	Window Display, P.V.C 3t	1	C,D,E,F
	048555036413	Window Display, P.V.C 3t	1	Dom
21	048545082621	Button Loudness, ABS Black	1	
22	6555002710	Spring	1	
23	048545119511	Button VCR2, ABS Gold	1	
24	048545088211	Knob Rotary, ABS Black	3	
25	9725002210	Spacer Felt, Black	2	
26	6165142210	Shield Fence	1	
27	058643800110	Knob Rotary, Black	1	
28	4408105810	Terminal Speaker, 8P	1	
29	7505206130	H/Sink, Reg.	1	
30	7505206210	H/Sink, Reg.	1	
31	4438108510	Jack RCA, 2P	1	
32	4438108710	Jack RCA, 6P	2	
33	4438108810	Jack RCA, 3P	4	
34	4438114210	Jack RCA, 2P	1	
35	4438006510	Jack Multi Room	1	A
36	7502007810	H/Sink Main	1	
37	6505135810	BKT H/Sink L	1	
38	6505135910	BKT H/Sink R	1	
39	6505103910	BKT P.C.B	2	
40	4408101510	Terminal ANT	1	Dom,A,B
	4408101610	Terminal ANT	1	C,D,E,F"
41	4438108610	Jack RCA, 4P	2	
42	4438109610	Jack RCA, 2P	1	
43	4408107010	Terminal Speaker, 2P	1	
44	4408105410	Terminal Speaker, 4P	1	
45	⚠ 4448102710	Outlet, 3P	1	A,B
	⚠ 4448103610	Outlet, 1P	1	Dom
	⚠ 4448103610	Outlet, 1P	1	
46	6528002810	Tie Locking	1	
47	7505206210	H/Sink, Reg.	1	
48	6528300110	Fastner	2	
49	6705008320	Spacer LED	1	
50	4658003710	SW Tact	44	
51	4628054410	SW Push	1	
52	4628058310	SW Push	1	
53	4438005010	Jack Phone	1	
54	3208052010	VR Rotary	1	
55	4438109810	Jack RCA, 3P	1	
56	6165138210	Shield Fence	1	
57	3208049510	VR Rotary	2	
58	046102038011	Chassis Back	1	Dom
	046102038021	Chassis Back	1	A
	046102038041	Chassis Back		C
	046102038051	Chassis Back	1	D
	046102038061	Chassis Back	1	E
	046102038071	Chassis Back	1	F
59	4408103710	GND Terminal	1	
	4408104910	GND Terminal	1	Dom
60	⚠ 4308001410	Cord AC	1	A,B
	⚠ 4308001610	Cord AC	1	Dom
	⚠ 4308007610	Cord AC	1	E
	⚠ 4308002310	Cord AC	1	C,D,F
61	6518000710	Stopper Cord	1	A,B
	6513000310	Stopper Cord	1	E,Dom
	6518000111	Stopper Cord	1	C,D,F
62	4328204210	Plug Jumper	3	
63	6163113710	Shield Fence	1	
64	4618006510	SW Slide, Voltage Sel. 6P	1	PT INDO
65	4618006610	SW Slide, Voltage Sel. 3P	1	PT INDO
66	6555609110	Spring Button	1	
67	3228019410	VR Motor	1	
68	4618007410	Dempha SW	1	B
69	⚠ 2828000411	Power Transformer, 120 V 60 Hz	1	A
	⚠ 2828009571	Power Transformer, 120/220 V 50/60 Hz	1	B
	⚠ 2828009551	Power Transformer, 230 V 50 Hz	1	C,D,F
	⚠ 2828009541	Power Transformer, 240 V 50 Hz	1	E
	⚠ 2828009647	Power Transformer, 220 V 60 Hz	1	Dom
	⚠ 2828009571	Power Transformer, 110/220 V 50/60 Hz	1	PT INDO
P1	4002030100	PCB Front(CPU)	1	
P1-1	4002030110	PCB Dolby	1	
P1-2	4002030120	PCB Tone	1	
P1-3	4002030130	PCB Volume	1	
P1-4	4002030140	PCB VR LED	1	
P2	4002030200	PCB Tuner	1	
P2-1	4002030210	PCB Power Supply	1	
P2-2	4002030220	PCB Surround	1	
P2-3	4002030230	PCB Balance	1	
P2-4	4002030240	PCB Power S/W	1	
P2-5	4002030250	PCB H/P Jack	1	
P3	4002030000	PCB Main	1	
P3-1	4002031000	PCB Vol. Sel.	1	
S1	8109230083	Screw #2BTC 3x8B	51	
S2	8159230081	Screw #2WPTC 3x8Y	14	
S3	8129230083	Screw #2FTC 3x8B	2	
S4	8119130103	Screw 3x10B	23	
S5	8159440083	Screw WSAM 4x8B	10	
S6	8109230063	Screw #2BTC 3x6B	11	

Ref. No.	Part No.	Description	Q'ty	Version
S7	8109230103	Screw #2BTC 3x10B	4	
S8	8099130121	Screw HEX MSPW 3x12Y	9	
S9	8099130161	Screw HEX MSPW 3x16Y	2	
S10	8119240061	Screw #2PTC 4x6Y	1	
S11	8155000710	Ground	4	

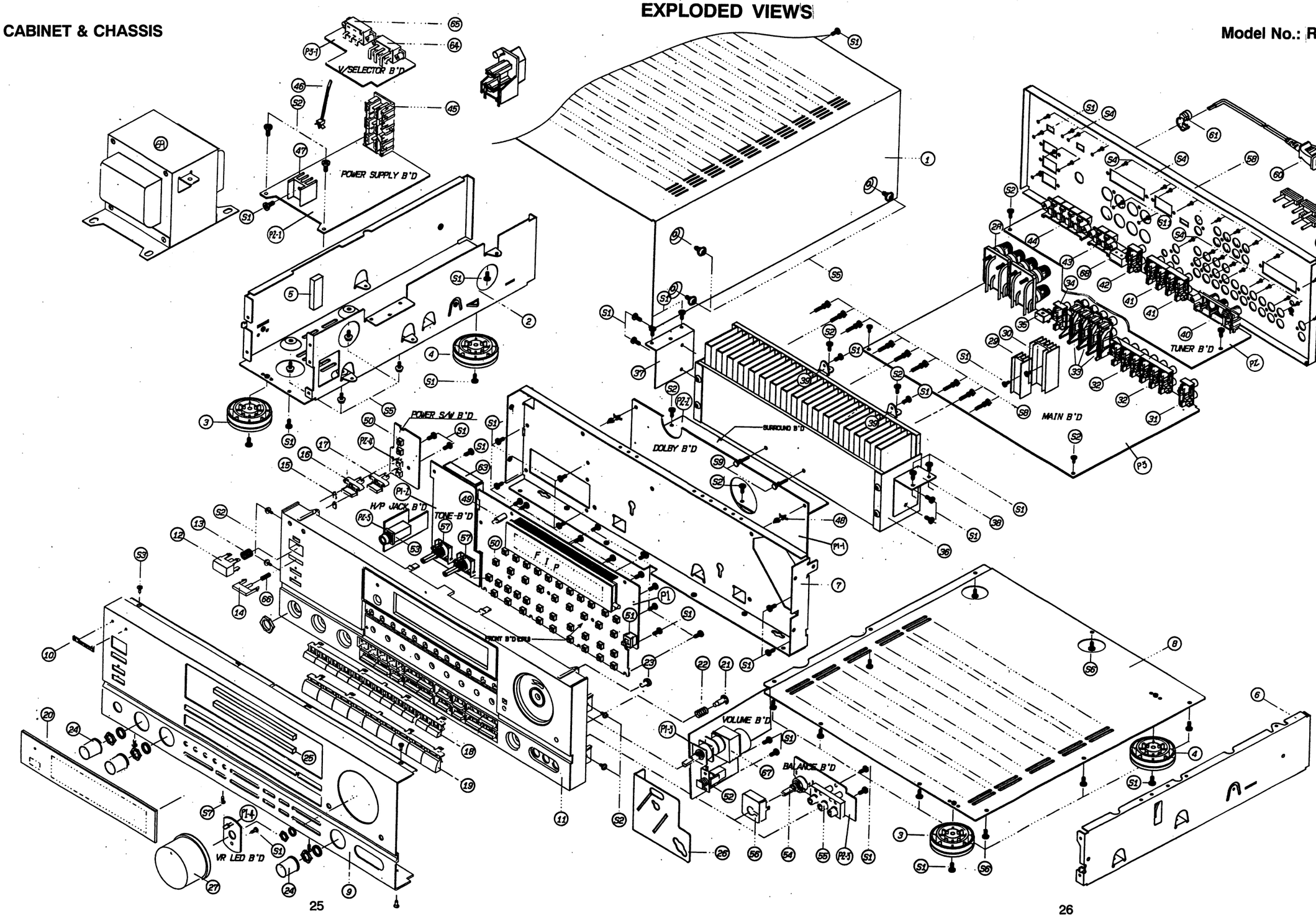
PRODUCT SAFETY NOTICE

Each precaution in this manual should be follower during servicing. Components idenfified with the IEC symbol ⚠ in the parts list and the safety can be of special significance. When replacing a component identified with ⚠ , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the su-pply circuit before returning the product to the customer.

CABINET & CHASSIS

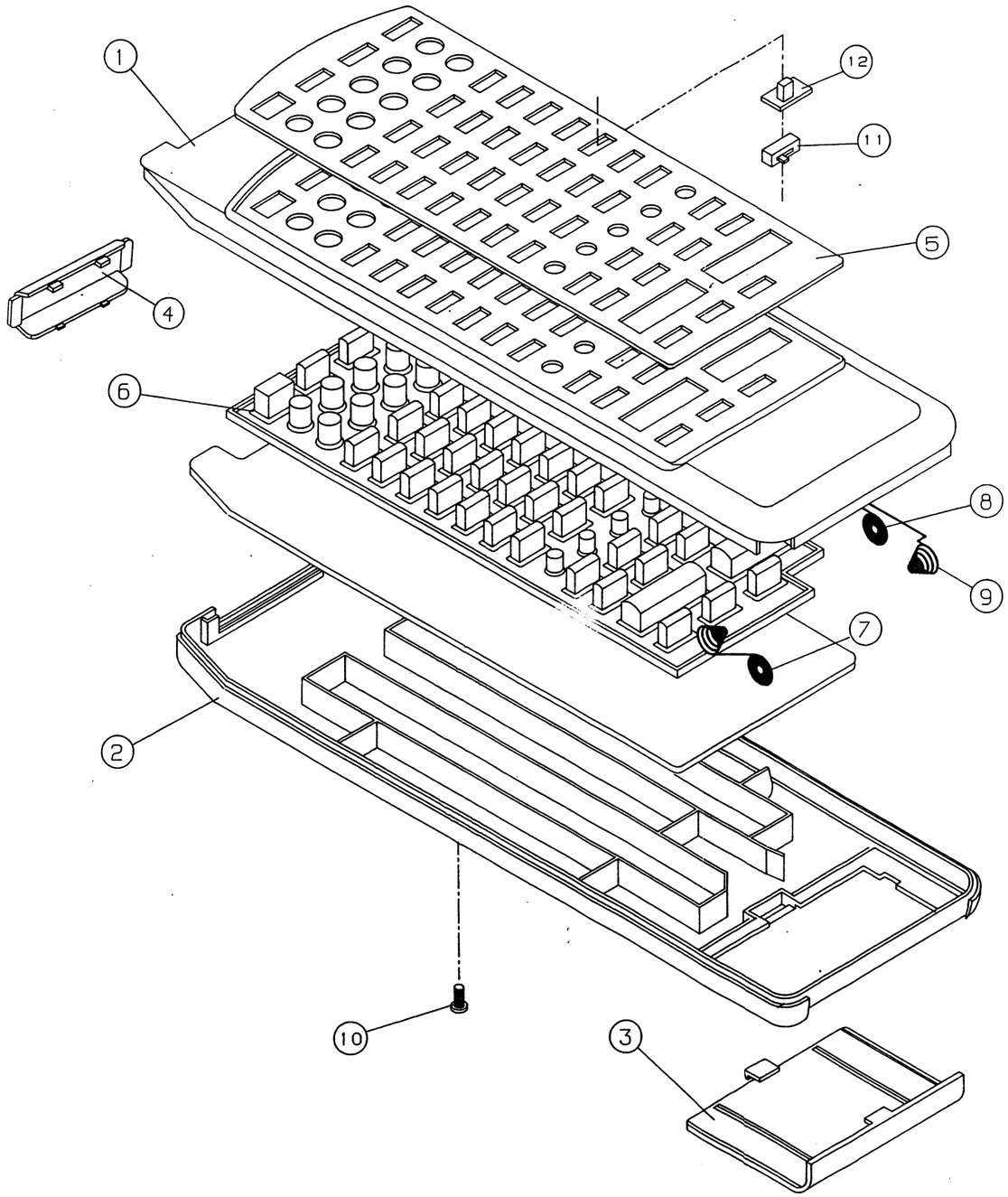
EXPLODED VIEWS

Model No.: RV - 6030R



REMOTE CONTROL UNIT

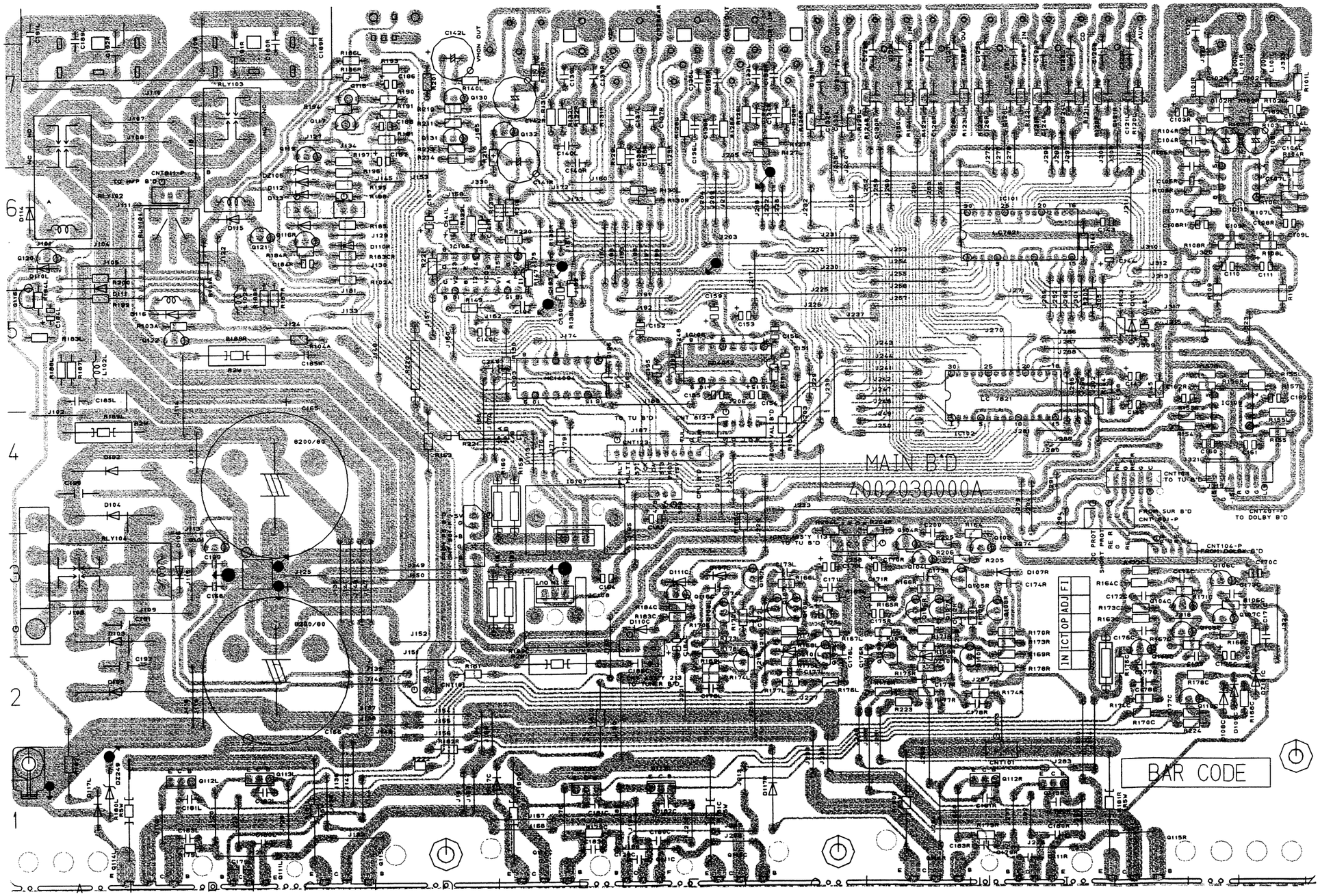
Model No.: RV - 6030R



Ref. No.	Parts No.	Description	Q'ty	Version
1	048582001117	Cover Top. Black	1	
	048582001118	Cover Top. Black	1	Dom
2	8582001210	Cover Bottom. Black	1	
3	8583004410	Cover Battery. Black	1	
4	8555040210	Window Sensor. Wine	1	
5	048552003631	Inlay Commander. Black	1	
	048552003632	Inlay Commander. Black	1	Dom
6	048722000951	Button Rubber. Gray	1	
	048722000952	Button Rubber. Gray	1	Dom
7	6555605310	Spring Battery (+,-)	1	
8	6555009710	Spring Battery(+)	1	
9	6555009810	Spring Battery(-)	1	
10	8019120103	Screw PM 2 x 10(B)	1	
11	4618008110	SW Slide	1	
12	8545095910	Knob Slide		

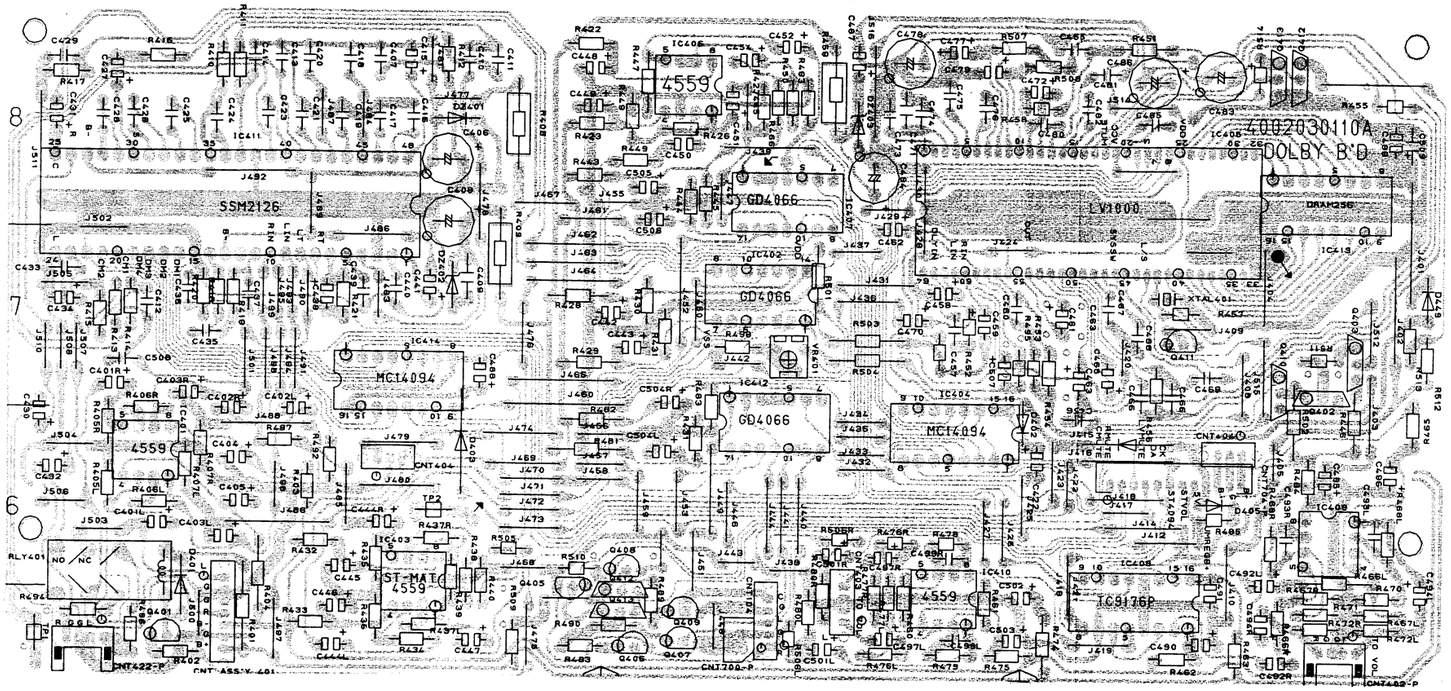
PRINTED CIRCUIT BOARDS

P.C.Board Main

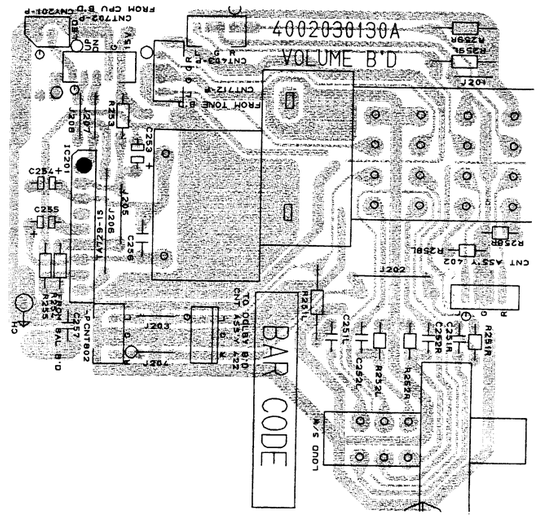


29 30

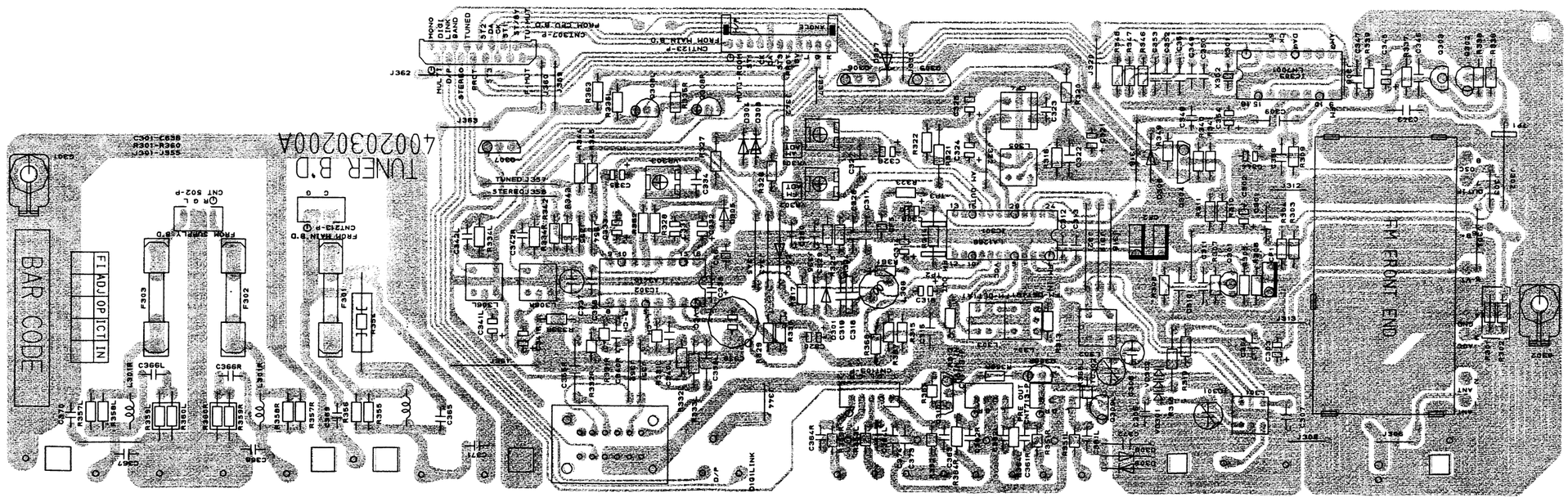
P.C.Board Dolby

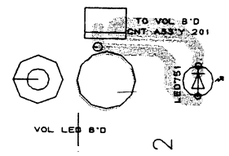


P.C.Board Volume



P.C.Board Tuner

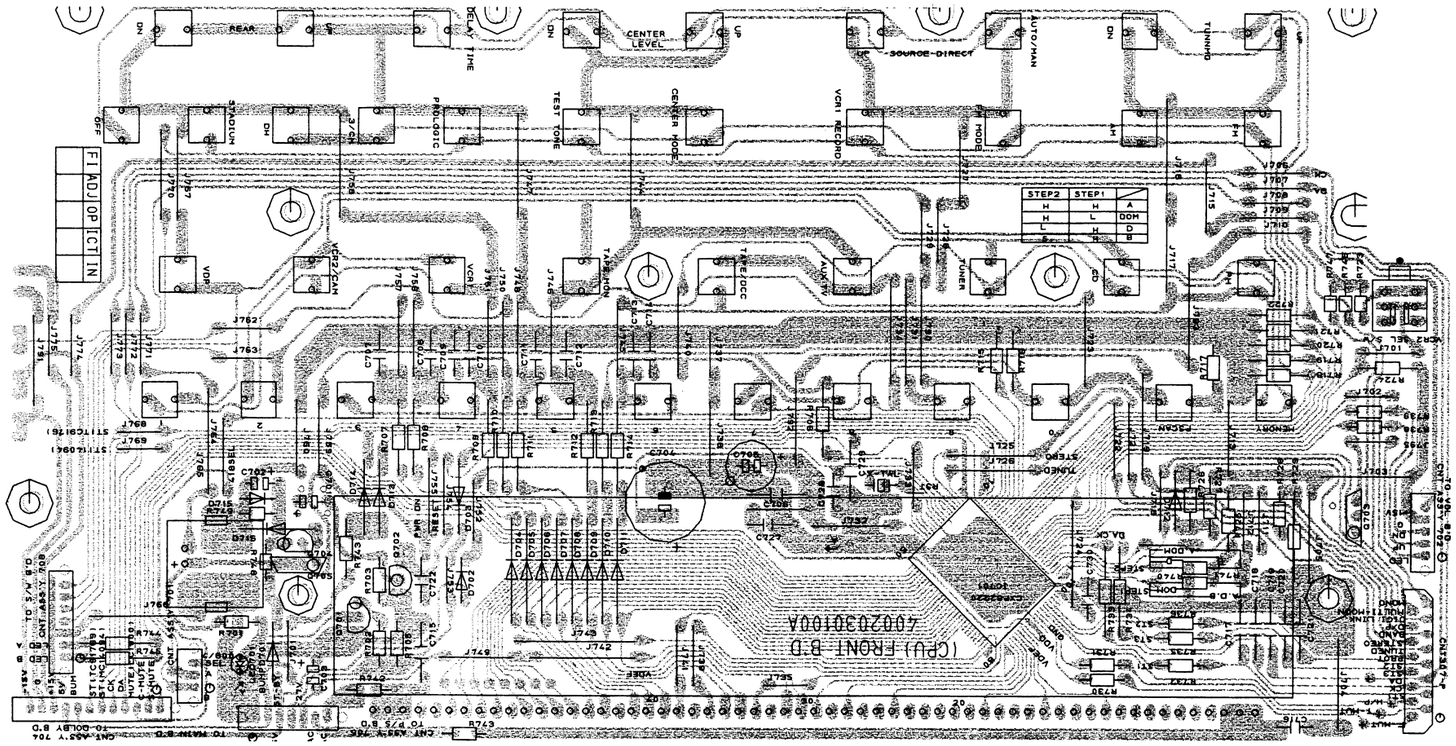




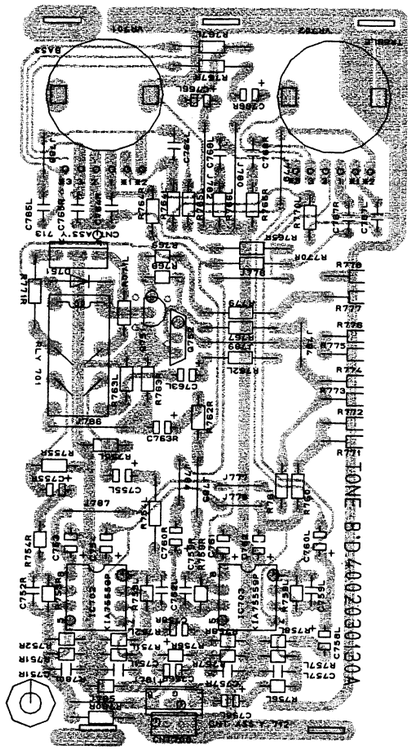
31

32

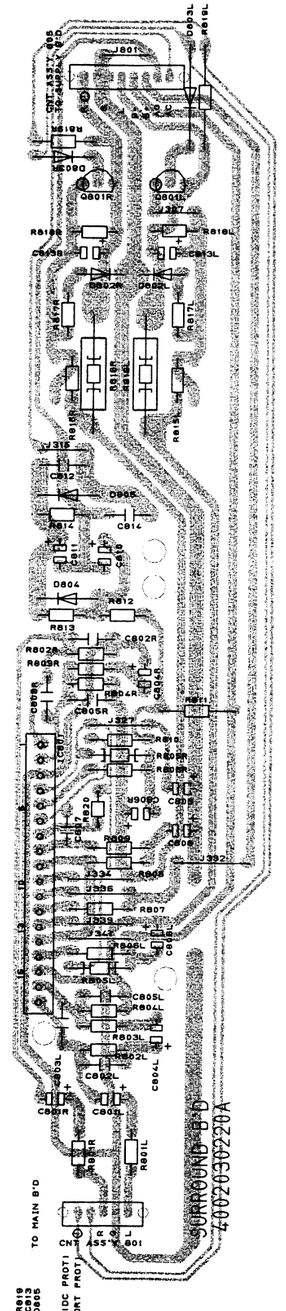
P.C.Board Front(CPU)



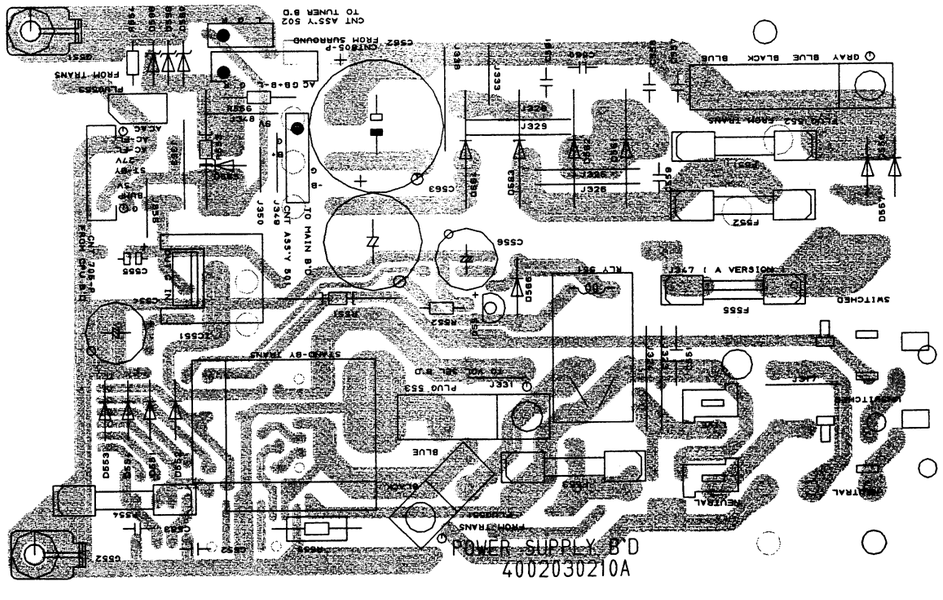
P.C.Board Tone



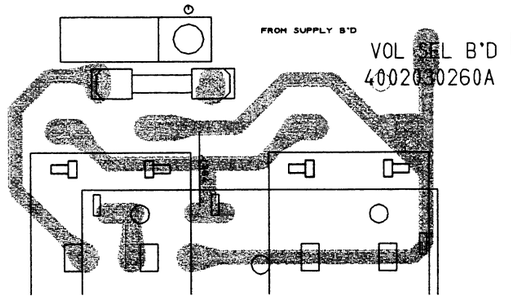
P.C.Board Surround



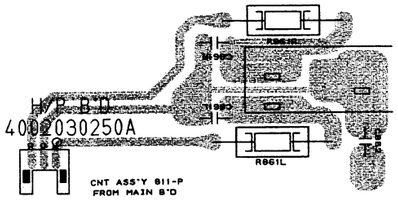
P.C.Board Power Supply



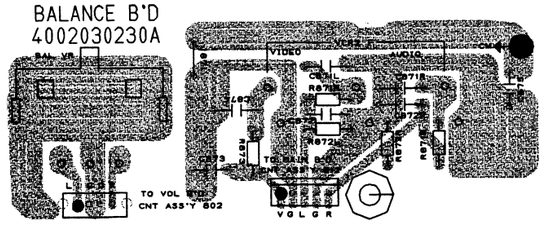
P.C.Board Vol. Sel.



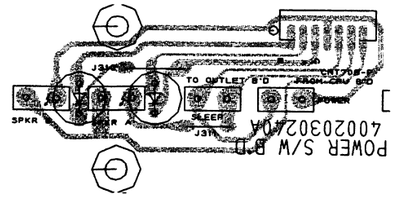
P.C.Board H/P



P.C.Board Balance



P.C.Board Power S/W



ELECTRICAL PARTS LIST

PRODUCT SAFETY NOTICE: Products marked with ⚠ have special characteristics important to safety.
If you replace any of these components, read carefully the product safety notice in this manual.
Don't degrade the safety of the product through improper servicin.
Resistor/Capacitor Tolerance-D:(±0.5%), J:(±5%), K:(±10%), M:(±20%), Z:(+80, -20%).

Ref. No.	Part No.	Description				Q'ty	Version
P3	**054011010073**	**Ass'y P.C.B Main**					
28	4408105810	Terminal Speaker, 8P				1	
29	7505206130	H/Sink, Reg.				1	
30	7505206210	H/Sink, Reg.				1	
31	4438108510	Jack RCA, 2P				1	
32	4438108710	Jack RCA, 6P				2	
33	4438108810	Jack RCA, 3P				4	
34	4438114210	Jack RCA, 2P				1	
35	4438006510	Jack Multi Room				1	A(Only)
	152622102014	Wire HI-W #22 220mm, Black					
	4235007310	Terminal Ground				1	
	4855000111	Pipe Ceramic 12mm				4	
	4855000210	Pipe Ceramic 7mm				4	
C101 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C102 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	
C103 L/R	3479247971	Electrolytic SA	4.7 uF	50 V	M	2	
C104 L/R	3579222530	Ceramic Disc	0.0022 uF	50 V	J	2	
C105 L/R	3479233041	Electrolytic SA	33 uF	25 V	M	2	
C106 L/R	3679182120	Mylar	0.0018 uF	100 V	J	2	
C107 L/R	3679562120	Mylar	0.0056 uF	100 V	J	2	
C108 L/R	3479210971	Electrolytic SA	1 uF	50 V	M	2	
C109 L/R	3679332120	Mylar	0.0033 uF	100 V	J	2	
C110/C111	3479222041	Electrolytic SA	22 uF	25 V	M	2	
C112	3679472120	Mylar	0.0047 uF	100 V	J	1	D
C120 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C121 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C122 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C123 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C124 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C125 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C126 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C127 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C128 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C129 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C130 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C131 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C132 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C133 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C134 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C135 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C136 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C137 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C138 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C139 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C140 L/R	3479233041	Electrolytic SA	33 uF	25 V	M	2	
C141 L/R	3479233041	Electrolytic SA	33 uF	25 V	M	2	
C142 L/R	3479347121	Electrolytic SG	470 uF	10 V	M	2	
C143/C144	3479247041	Electrolytic SA	47 uF	25 V	M	2	
C145	3479210971	Electrolytic SA	1 uF	50 V	M	1	
C146	3579103530	Ceramic Disc	0.01 uF	50 V	Z	1	
C147/C148	3479247041	Electrolytic SA	47 uF	25 V	M	2	
C150	3479347121	Electrolytic SG	470 uF	10 V	M	1	
C151	3479247041	Electrolytic SA	47 uF	25 V	M	1	
C152-C156	3479210071	Electrolytic SA	10 uF	50 V	M	5	
C157	3479233041	Electrolytic SA	33 uF	25 V	M	1	
C159	3479210071	Electrolytic SA	10 uF	50 V	M	1	
C160/C161	3479247041	Electrolytic SA	47 uF	25 V	M	2	
C162 L/R	3479233971	Electrolytic SA	3.3 uF	50 V	M	2	
C163/C164	3479233971	Electrolytic SA	3.3 uF	50 V	M	2	

Ref. No.	Part No.	Description				Q'ty	Version
C165/C166	3419582200	Electrolytic HS	8200 uF	80 V		2	
C168/C169	3679473120	Mylar	0.047 uF	100 V	J	2	FTZ
C170C	3479247971	Electrolytic SA	4.7 uF	50 V	M	1	
C170 L/R	3479247971	Electrolytic SA	4.7 uF	50 V	M	2	
C171C	3579471130	Ceramic Disc	470 pF	50 V	J	1	
C171 L/R	3579471130	Ceramic Disc	470 pF	50 V	J	2	
C172C	3579471130	Ceramic Disc	470 pF	50 V	J	1	
C172 L/R	3579471130	Ceramic Disc	470 pF	50 V	J	2	
C174C	3579150130	Ceramic Disc	15 pF	50 V	J	1	
C174 L/R	3679473120	Mylar	0.047 uF	100 V	J	2	
C175C	3479233041	Electrolytic SA	33 uF	25 V	M	1	
C175 L/R	3479233041	Electrolytic SA	33 uF	25 V	M	2	
C176C	3579309030	Ceramic Disc	3 pF	50 V	D	1	
C176 L/R	3579150130	Ceramic Disc	15 pF	50 V	J	2	
C177C	3579509030	Ceramic Disc	5 pF	50 V	D	1	
C177 L/R	3579309030	Ceramic Disc	3 pF	50 V	D	2	
C178C	3579509030	Ceramic Disc	5 pF	50 V	D	1	
C178 L/R	3579509030	Ceramic Disc	5 pF	50 V	D	2	
C179C	3579102530	Ceramic Disc	1000 pF	50 V	J	1	
C179 L/R	3579331130	Ceramic Disc	330 pF	50 V	J	2	
C180C	3679472120	Mylar	0.0047 uF	100 V	J	1	
C180 L/R	3679473120	Mylar	0.047 uF	100 V	J	2	
C181C	3579151130	Ceramic Disc	150 pF	50 V	J	1	
C181 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	
C182C	3579151130	Ceramic Disc	150 pF	50 V	J	1	
C182L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	
C183C	3679473120	Mylar	0.047 uF	100 V	J	1	
C183 L/R	3679473120	Mylar	0.047 uF	100 V	J	2	
C184C	3479247971	Electrolytic SA	4.7 uF	50 V	M	1	
C184 L/R	3479247971	Electrolytic SA	4.7 uF	50 V	M	2	
C185	3479310121	Electrolytic SG	100 uF	10 V	M	1	
C185C	3679473120	Mylar	0.047 uF	100 V	J	1	
C185 L/R	3679473120	Mylar	0.047 uF	100 V	J	2	
C186	3479347121	Electrolytic SG	470 uF	10 V	M	1	
C189 L/R	3679222120	Mylar	0.0022 uF	100 V	J	2	D
C190	3509103451	Ceramic Disc	0.01 uF	500 V		1	
C190R	3679222120	Mylar	0.0022 uF	100 V	J	1	D
C191	3509103451	Ceramic Disc	0.01 uF	500 V		1	
C191L	3679222120	Mylar	0.0022 uF	100 V	J	1	
C191R	3519222935	Ceramic Tubular	0.0022 uF	50 V	K	1	D
C192	3509103451	Ceramic Disc	0.01 uF	500 V		1	
C192R	3519222935	Ceramic Tubular	0.0022 uF	50 V	K	1	
C193	3579471130	Ceramic Disc	470 pF	50 V	J	1	
C194	3479222971	Electrolytic SA	2.2 uF	50 V	M	1	
C195	3479247041	Electrolytic SA	47 uF	25 V	M	1	
C196	3579331130	Ceramic Disc	330 pF	50 V	J	1	
C197/C198	3579102530	Ceramic Disc	1000 pF	50 V	J	2	
C199	3579509030	Ceramic Disc	5 pF	50 V	D	1	
C249	3579104530	Ceramic Disc	0.1 uF	50 V	Z	1	
CNT103	436205253332	Lead Ass'y 5P 250mm				1	
CNT104-P	4428516410	Wafer 5P				1	
CNT123	436211083332	Lead Ass'y 11P 80mm				1	
CNT213	436204253332	Lead Ass'y 4P 250mm				1	
CNT401-P	4428516610	Wafer 7P				1	
CNT501-P	4428506910	Wafer 5P				1	
CNT701-P	4428516210	Wafer 3P				1	
CNT801-P	4428516410	Wafer 5P				1	
CNT811-P	4428516210	Wafer 3P				1	
CNT113	436204163332	Lead Ass'y 4P 160mm				1	

Ref. No.	Part No.	Description	Q'ty	Version
CNT812-P	4428516410	Wafer 5P	1	
CNT101	436402183231	Lead Ass'y 2P 180mm	1	
CNTP POS HS	4428508210	Wafer 2P	1	
CNTP POS TR	4428508210	Wafer 2P	1	
CNT POS TR	2438012200	Posistor, PTH9M04BE222TS2F33	1	
CNT POS HS	2438012200	Posistor, PTH9M04BE222TS2F33	1	
D101	2058322101	1N4148M, Switching	1	
D102-D105	2058100138	PX6A03, Rectifier	4	
D106	2258100135	1N4002, Rectifier	1	
D107C	2058322101	1N4148M, Switching	1	
D107 L/R	2058322101	1N4148M, Switching	2	
D108C	2058322101	1N4148M, Switching	1	
D109C	2058322101	1N4148M, Switching	1	
D110C	2058322101	1N4148M, Switching	1	
D110 L/R	2058322101	1N4148M, Switching	2	
D111	2058322101	1N4148M, Switching	1	
D111C	2058322101	1N4148M, Switching	1	
D111 L/R	2058322101	1N4148M, Switching	2	
D112/D113	2058322101	1N4148M, Switching	2	
D114-D116	2258100135	1N4002, Rectifier	3	
D117C	2058322101	1N4148M, Switching	1	
D117 L/R	2058322101	1N4148M, Switching	2	
D210L/R	2258599116	Zener, UZ 12.0BSC	2	
DZ101C	2258599115	Zener, UZ 27.0BSC	1	
DZ101 L/R	2258599116	Zener, UZ 12.0BSC	2	
DZ105	2258599116	Zener, UZ 12.0BSC	1	
IC101/IC102	2168017132	LC7821	2	
IC103	2138009115	IC, MC14094	1	
IC105	2168027106	BA7625, Video SW	1	
IC106	2138001114	IC, GD4052	1	
IC107	2168601105	GD7815, Regulator	1	
IC108	2168601111	GD7915GS, Regulator	1	
IC109/IC110	2168206104	KIA75559P, OP Amp	2	
L101 L/R	2648001010	Coil Inductor, 50uH	2	
L102C	2648601470	0.5UH	1	
L102 L/R	2648601470	0.5UH	2	
NOSILk	3519103935	Ceramic Tubular 0.01 uF 50V J	1	
NOSILk	2058322101	1N4148M, Switching	1	
Q101	2208606114	MPSA06Y, NPN Silicon	1	
Q104C	2208606108	kTC2240BL/BKTC3200, NPN Silicon	1	
Q105C	2208606108	kTC2240BL/BKTC3200, NPN Silicon	1	
Q105 L/R	2208206105	kTA1015Y/BKTA1266, PNP	2	
Q106C	2208606108	kTC2240BL/BKTC3200, NPN Silicon	1	
Q106 L/R	2208606108	kTC2240BL/BKTC3200, NPN Silicon	2	
Q107C	2208606108	KTC2240BL/BKTC3200, NPN Silicon	1	
Q107 L/R	2208606108	KTC2240BL/BKTC3200, NPN Silicon	2	
Q108 L/R	2208606104	KTC1815Y/BKTC3198, NPN Silicon	2	
Q109C	2208206102	BKTA949Y, PNP	1	
Q109 L/R	2208206102	BKTA949Y, PNP	2	
Q110C	2208606107	KTC2229Y/KTC3206, NPN Silicon	1	
Q110 L/R	2208606107	KTC2229Y/KTC3206, NPN Silicon	2	
Q111C	2208606114	MPSA06Y, NPN Silicon	1	
Q111 L/R	2208606114	MPSA06Y, NPN Silicon	2	
Q112C	2008602102	KSC2690A-Y, NPN	1	
Q112 L/R	2028407118	2SC2168, NPN Silicon	2	
Q113C	2008202101	KSA1220A-Y	1	
Q113 L/R	2028107115	2SA958, PNP Silicon	2	
Q114C	2028416107	2SC3854, NPN	1	
Q114 L/R	2028407118	2SC2168, NPN Silicon	2	
Q115C	2028116104	2SA1490, PNP Silicon	1	
Q115 L/R	2028116103	2SA1491, PNP Silicon	2	
Q116C	2208606104	KTC1815Y/BKTC3198, NPN Silicon	1	
Q116 L/R	2208606104	KTC1815Y/BKTC3198, NPN Silicon	2	
Q117-Q122	2208606104	KTC1815Y/BKTC3198, NPN Silicon	6	

Ref. No.	Part No.	Description	Q'ty	Version
Q130-Q132	2208206105	KTA1015Y/BKTA1266, PNP	3	
Q169	2208606114	MPSA06Y, NPN Silicon	1	
R101A	3069221970	Carbon Film 220 ohm 1/5W J	1	
R101 L/R	3069102970	Carbon Film 1 kohm 1/5W J	2	
R102A	3069102970	Carbon Film 1 kohm 1/5W J	1	
R102 L/R	3069913970	Carbon Film 91 kohm 1/5W J	2	
R103A	3069221970	Carbon Film 220 ohm 1/5W J	1	
R103 L/R	3069913970	Carbon Film 91 kohm 1/5W J	2	
R104A	3069102970	Carbon Film 1 kohm 1/5W J	1	
R104 L/R	3069821970	Carbon Film 820 ohm 1/5W J	2	
R105 L/R	3069433970	Carbon Film 43 kohm 1/5W J	2	
R106C	3069333970	Carbon Film 33 kohm 1/5W J	1	
R106 L/R	3069564970	Carbon Film 560 kohm 1/5W J	2	
R107 L/R	3069561970	Carbon Film 560 ohm 1/5W J	2	
R108 L/R	3069104970	Carbon Film 100 kohm 1/5W J	2	
R109/R110	3069471970	Carbon Film 470 ohm 1/5W J	2	
R120 L/R	3069561970	Carbon Film 560 ohm 1/5W J	2	
R121 L/R	3069561970	Carbon Film 560 ohm 1/5W J	2	
R122 L/R	306956190	Carbon Film 560 ohm 1/5W J	2	
R123 L/R	3069561970	Carbon Film 560 ohm 1/5W J	2	
R124 L/R	3069561970	Carbon Film 560 ohm 1/5W J	2	
R125 L/R	3069561970	Carbon Film 560 ohm 1/5W J	2	
R126 L/R	3069561970	Carbon Film 560 ohm 1/5W J	2	
R127 L/R	3069104970	Carbon Film 100 kohm 1/5W J	2	
R128 L/R	3069561970	Carbon Film 560 ohm 1/5W J	2	
R129 L/R	3069561970	Carbon Film 560 ohm 1/5W J	2	
R130 L/R	3069104970	Carbon Film 100 kohm 1/5W J	2	
R131 L/R	3069561970	Carbon Film 560 ohm 1/5W J	2	
R132 L/R	3069104970	Carbon Film 100 kohm 1/5W J	2	
R138 L/R	3069750970	Carbon Film 75 ohm 1/5W J	2	
R139 L/R	3069750970	Carbon Film 75 ohm 1/5W J	2	
R140 L/R	3069750970	Carbon Film 75 ohm 1/5W J	2	
R141/R142	3069471970	Carbon Film 470 ohm 1/5W J	2	
R143	3069104970	Carbon Film 100 kohm 1/5W J	1	
R144/R145	3069471970	Carbon Film 470 ohm 1/5W J	2	
R147	3069750970	Carbon Film 75 ohm 1/5W J	1	
R149	3069750970	Carbon Film 75 ohm 1/5W J	1	
R150	3029330572	Metal Film 33 ohm 2W J	1	
R150	3069332970	Carbon Film 3.3 kohm 1/5W J	1	
R151	3069472970	Carbon Film 4.7 kohm 1/5W J	1	
R152	3069332970	Carbon Film 3.3 kohm 1/5W J	1	
R153	3069750970	Carbon Film 75 ohm 1/5W J	1	
R154/R155	3069471970	Carbon Film 470 ohm 1/5W J	2	
R156 L/R	3069913970	Carbon Film 91 kohm 1/5W J	2	
R157 L/R	3069913970	Carbon Film 91 kohm 1/5W J	2	
R158	3069332970	Carbon Film 3.3 kohm 1/5W J	1	
R159-R162	3029220572	Metal Film 22 ohm 2W J	4	
R163	3069221970	Carbon Film 220 ohm 1/5W J	1	
R163C	3069122970	Carbon Film 1.2 kohm 1/5W J	1	
R164C	3069122970	Carbon Film 1.2 kohm 1/5W J	1	
R165C	3069273970	Carbon Film 27 kohm 1/5W J	1	
R165 L/R	3069473970	Carbon Film 47 kohm 1/5W J	2	
R166C	3069122970	Carbon Film 1.2 kohm 1/5W J	1	
R166 L/R	3069152970	Carbon Film 1.5 kohm 1/5W J	2	
R167C	3069123970	Carbon Film 12 kohm 1/5W J	1	
R167 L/R	3069103970	Carbon Film 10 kohm 1/5W J	2	
R168C	3069153970	Carbon Film 15 kohm 1/5W J	1	
R168 L/R	3069103970	Carbon Film 10 kohm 1/5W J	2	
R169 L/R	3069102970	Carbon Film 1 kohm 1/5W J	2	
R170C	3069333970	Carbon Film 33 kohm 1/5W J	1	
R170 L/R	3069221970	Carbon Film 220 ohm 1/5W J	2	
R171C	3069681970	Carbon Film 680 ohm 1/5W J	1	
R171 L/R	3069681970	Carbon Film 680 ohm 1/5W J	2	
R172C	3069332970	Carbon Film 3.3 kohm 1/5W J	1	

Ref. No.	Part No.	Description				Q'ty	Version
R172 L/R	3069221970	Carbon Film	220 ohm	1/5W	J	2	
R173C	3069332970	Carbon Film	3.3 kohm	1/5W	J	1	
R173 L/R	3069221970	Carbon Film	220 ohm	1/5W	J	2	
R174C	3069273970	Carbon Film	27 kohm	1/5W	J	1	
R174 L/R	3069473970	Carbon Film	47 kohm	1/5W	J	2	
R175C	3069121970	Carbon Film	120 ohm	1/5W	J	1	
R175 L/R	3069121970	Carbon Film	120 ohm	1/5W	J	2	
R176C	3069272970	Carbon Film	2.7 kohm	1/5W	J	1	
R176 L/R	3069272970	Carbon Film	2.7 kohm	1/5W	J	2	
R177C	3069122970	Carbon Film	1.2 kohm	1/5W	J	1	
R177 L/R	3069122970	Carbon Film	1.2 kohm	1/5W	J	2	
R178C	3069121970	Carbon Film	120 ohm	1/5W	J	1	
R178 L/R	3069121970	Carbon Film	120 ohm	1/5W	J	2	
R179C	3069331970	Carbon Film	330 ohm	1/5W	J	1	
R179 L/R	3069471970	Carbon Film	470 ohm	1/5W	J	2	
R180C	3059398782	Cement	0.39 ohm	5W	J	1	
R180 L/R	3059398782	Cement	0.39 ohm	5W	J	2	
R181C	3059398782	Cement	0.39 ohm	5W	J	1	
R181 L/R	3059398782	Cement	0.39 ohm	5W	J	2	
R182C	3069751970	Carbon Film	750 ohm	1/5W	J	1	
R182 L/R	3069821970	Carbon Film	820 ohm	1/5W	J	2	
R183C	3069153970	Carbon Film	15 kohm	1/5W	J	1	
R183 L/R	3069153970	Carbon Film	15 kohm	1/5W	J	2	
R184C	3069222970	Carbon Film	2.2 kohm	1/5W	J	1	
R184 L/R	3069222970	Carbon Film	2.2 kohm	1/5W	J	2	
R185	3069221970	Carbon Film	220 ohm	1/5W	J	1	
R186C	3069223970	Carbon Film	22 kohm	1/5W	J	1	
R186 L/R	3069223970	Carbon Film	22 kohm	1/5W	J	2	
R187C	3069220970	Carbon Film	22 ohm	1/5W	J	1	
R187 L/R	3069220970	Carbon Film	22 ohm	1/5W	J	2	
R188C	3069220970	Carbon Film	22 ohm	1/5W	J	1	
R188 L/R	3069220970	Carbon Film	22 ohm	1/5W	J	2	
R189C	3029100570	Metal Film	10 ohm	2W	J	1	
R189 L/R	3029100570	Metal Film	10 ohm	2W	J	2	
R193	3069222970	Carbon Film	2.2 kohm	1/5W	J	1	
R194	3069472970	Carbon Film	4.7 kohm	1/5W	J	1	
R195	3069152970	Carbon Film	1.5 kohm	1/5W	J	1	
R196	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R197	3069472970	Carbon Film	4.7 kohm	1/5W	J	1	
R198	3069273970	Carbon Film	27 kohm	1/5W	J	1	
R199	3069221970	Carbon Film	220 ohm	1/5W	J	1	
R200	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R201J	3069332970	Carbon Film	3.3 kohm	1/5W	J	1	
R203	3069332970	Carbon Film	3.3 kohm	1/5W	J	1	
R205	3069471970	Carbon Film	470 ohm	1/5W	J	1	
R210/R211	3069101970	Carbon Film	100 ohm	1/5W	J	2	
R213-R216	3069101970	Carbon Film	100 ohm	1/5W	J	4	
R221/R222	3029680572	Metal Film	68 ohm	2W	J	2	
R223-R225	3069183970	Carbon Film	18 kohm	1/5W	J	3	
R248	3069332970	Carbon Film	3.3 kohm	1/5W	J	1	
RLY101	5528001630	Relay, OSA-SS-224DM5				1	
RLY102/103	5528001460	Relay, HRCR321 DC24V				2	
RLY104	5528001740	Relay, OMI-SS-224L				1	
CNT811	436203503332	Lead Ass'y 3P 500mm				1	

P1-3 054011010074 Ass'y P.C.B Volume

52	4628058310	SW Push				1	
67	3228019410	VR Motor				1	
	152622101057	Wire Lug #22 100mm, Black					
C251 L/R	3509471130	Ceramic Disc	470 pF	50 V	J	2	
C252 L/R	3679823120	Mylar	0.082 uF	100 V	J	2	
C253	3479247041	Electrolytic SA	47 uF	25 V	M	1	
C254/C255	3479310121	Electrolytic SG	100 uF	10 V	M	2	
C256	3519473935	Ceramic Tubular	0.047 uF	50 V	J	1	

Ref. No.	Part No.	Description				Q'ty	Version
CNT201-P	4428508210	Wafer 2P				1	
CNT402	436204353332	Lead Ass'y 4P 350mm				1	
CNT403-P	4428516310	Wafer 4P				1	
CNT422	436204163132	Lead Ass'y 4P 150mm				1	
CNT702-P	4428516410	Wafer 5P				1	
CNT712-P	4428516310	Wafer 4P				1	
CNT802-P	4428516310	Wafer 4P				1	
D751	2058322101	1N4148M, Switching				1	
IC251	2168007204	TA7291S				1	
R251 L/R	3069513970	Carbon Film	51 k ohm	1/5W	J	2	
R252 L/R	3069622970	Carbon Film	6.2 k ohm	1/5W	J	2	
R253	3069330970	Carbon Film	33 ohm	1/5W	J	1	
R254	3069103970	Carbon Film	10 k ohm	1/5W	J	1	
R255	3069472970	Carbon Film	4.7 k ohm	1/5W	J	1	
R258 L/R	3069622970	Carbon Film	6.2 k ohm	1/5W	J	2	

P2 054011010075 Ass'y P.C.B Tuner

40	4408101510	Terminal ANT				1	Dom,A,B
	4408101610	Terminal ANT				1	C,D,E,F
41	4438108610	Jack RCA, 4P				2	
42	4438109610	Jack RCA, 2P				1	
43	4408107010	Terminal Speaker, 2P				1	
44	4408105410	Terminal Speaker, 4P				1	
68	4618007410	Dempha SW				1	B
	4235007310	Terminal Ground				2	
	4255001010	Clip Fuse				6	
C301	3579103530	Ceramic Disc	0.01 uF	50 V	Z	1	
C302	3479310131	Electrolytic SG	100 uF	16 V	Z	1	
C303	3479247871	Electrolytic SA	0.47 uF	50 V	M	1	
C304	3579103530	Ceramic Disc	0.01 uF	50 V	Z	1	
C305	3579223530	Ceramic Disc	0.022 uF	50 V	Z	1	
C306	3579471130	Ceramic Disc	470 pF	50 V	J	1	
C307	3679223120	Mylar	0.022 uF	100 V	J	1	
C308	3479247971	Electrolytic SA	4.7 uF	50 V	M	1	
C309	3579103530	Ceramic Disc	0.01 uF	50 V	Z	1	
C310	3579223530	Ceramic Disc	0.022 uF	50 V	Z	1	
C311	3519223935	Ceramic Tubular	0.022 uF	50 V	J	1	
C312/C313	3579473530	Ceramic Disc	0.047 uF	50 V	Z	2	
C314	3479222971	Electrolytic SA	2.2 uF	50 V	M	1	A,Dom
C314	3479222971	Electrolytic SA	22 µF	50 V	Z	2	A,Dom
C314	3479210971	Electrolytic SA	1 µF	50 V	Z	2	B,C,D,E,F
C315	3579103530	Ceramic Disc	0.01 uF	50 V	Z	1	
C316	3479247041	Electrolytic SA	47 uF	25 V	M	1	
C317	3579331130	Ceramic Disc	330 pF	50 V	J	1	
C318	3069820970	Carbon Film	82 ohm	1/5W	J	1	D
C319	3579101130	Ceramic Disc	100 pF	50 V	J	1	D
C320/C321	3479247971	Electrolytic SA	4.7 uF	50 V	M	2	
C322	3579223530	Ceramic Disc	0.022 uF	50 V	Z	1	
C323	3579470130	Ceramic Disc	47 pF	50 V	J	1	
C324	3479222971	Electrolytic SA	2.2 uF	50 V	M	1	
C325	3479233971	Electrolytic SA	3.3 uF	50 V	M	1	
C326	3479210071	Electrolytic SA	10 uF	50 V	M	1	
C327	3579473530	Ceramic Disc	0.047 uF	50 V	Z	1	
C328	3579331130	Ceramic Disc	330 pF	50 V	J	1	
C330	3679393120	Mylar	0.039 uF	100 V	J	1	
C331/C332	3479247871	Electrolytic SA	0.47 uF	50 V	M	2	
C333	3479210971	Electrolytic SA	1 uF	50 V	M	1	
C335	3479210071	Electrolytic SA	10 uF	50 V	M	1	
C336	3679473120	Mylar	0.047 uF	100 V	J	1	
C337	3619681110	Poly	680 pF	50 V	J	1	
C338	3579103530	Ceramic Disc	0.01 uF	50 V	Z	1	
C339	3479322131	Electrolytic SG	220 uF	16 V	M	1	
C340 L/R	3619391110	Poly	390 pF	50 V	J	2	
C340 L/R	3619391110	Poly	390 PF	50 V	J	2	A,Dom

Ref. No.	Part No.	Description				Q'ty	Version
C340 L/R	3619181110	Poly	180 PF	50 V	J	2	B,C,D,E,F
C341 L/R	3479222971	Electrolytic SA	2.2 uF	50 V	M	2	
C342 L/R	3679392120	Mylar	0.0039 uF	100 V	J	2	
C343	3579103530	Ceramic Disc	0.01 uF	25 V	Z	1	
C344	3479247041	Electrolytic SA	47 uF	50 V	Z	1	
C345	3479210971	Electrolytic SA	1 uF	50 V	M	1	
C346	3579223530	Ceramic Disc	0.022 uF	50 V	Z	1	
C347	3579103530	Ceramic Disc	0.01 uF	50 V	Z	1	
C348	3579103530	Ceramic Disc	0.022 uF	50 V	Z	1	
C349/C350	3528330210	Ceramic Disc CH	33 pF	50 V	J	2	
C351/C352	3579101130	Ceramic Disc	100 pF	50 V	J	2	
C362 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C353	3579101130	Ceramic Disc	100 pF	50 V	J	1	
C354	3479247041	Electrolytic SA	47 uF	50 V	Z	1	
C355L/R	3619101110	Poly	100 pF	50 V	J	2	
C356	3579100130	Ceramic Disc	10 pF	50 V	D	1	
C361 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C363	3579101130	Ceramic Disc	100 pF	50 V	J	1	D
C364 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	D
C365	3579222530	Ceramic Disc	0.0022 uF	50 V	J	1	D
C367-C369	3579222530	Ceramic Disc	0.0022 uF	50 V	J	3	D
C370	3579222530	Ceramic Disc	0.0022 uF	50 V		1	
C371	3579222530	Ceramic Disc	0.0022 uF	50 V	J	1	D
C372-C374	3519104935	Ceramic Tubular	0.1 uF	50 V	J	3	
CF1/CF2	3908011001	Filter, SFE10.7MA8				2	B,C,D,E,F
CF1/CF2	3908011001	Filter, SFE10.7NA8				2	Dom,A
CF1/CF2		Filter, 10.7NS3G				2	B,C,D,E,F
CF3	3908001020	Filter, SFU450C4N				1	
CF4	3908001150	Filter, SFZ450B				1	
CF6	3938001009	Resonator, CSB456F11				1	
CNT103-P	4428516410	Wafer 5P				1	
CNT113-P	4428516310	Wafer 4P				1	
CNT123-P	4428525610	Wafer 11P				1	
CNT307-P	4428526285	Wafer FPC 16P				1	
CNT213-P	4428516310	Wafer 4P				1	
CNT502-P	4428516310	Wafer 4P				1	
CNT713-P	4428516310	Wafer 4P				1	
D301-D305	2058322101	1N4148M, Switching				5	
D306	2258599103	Zener, UZ 5.1BSB				1	
D307	2258599122	Zener UZ 11.0BSC				1	
D308/D309	2058322101	1N4148M, Switching				2	
F301	⚠ 5508203021	Fuse, NB 5A 125V 20mm				1	A
	⚠ 5508203030	Fuse, NB 5 A 250 V				1	B
	⚠ 5508403035	Fuse, F 5 A 250V				1	C,D,E,F
	⚠ 5508203030	Fuse, NB 5 A 250 V				1	Dom
⚠ F302/F303	5508102421	Fuse, SB 2A 125V 20mm				2	A
	⚠ 5508202730	Fuse, NB 3.15 A 250 V				2	B
	⚠ 5508402735	Fuse, F 3.15 A 250 V				2	C,D,E,F
	⚠ 5508202630	Fuse, NB 3 A 250 V				2	Dom
FE301	3928801930	FE306-A15 FM Tuner				1	A,C,D,E,F,Dom
FE301	3928801890	FE107-G60 FM Tuner				1	D
IC301	2138017112	IC, LM7001				1	
IC302	2168017128	LA1266				1	
IC303	2168002112	IC, MPX KA2265				1	
L301	2608201120	Coil, AM ANT				1	
L301L/R	2648001010	Coil Inductor, 50uH				2	
L302	2638201150	Coil, AM OSC				1	
L303	2838501110	Coil, FM QUAD DET A				1	
L304	2838501210	Coil, FM QUAD DET B				1	
L305	2848001250	Coil, AN IFT P-7SB				1	
L306L/R	2658301100	Coil, MPX 19 kHz FB-7SG				2	
L308	2648601430	20.8mH				1	D
L309	2848001010	Coil Inductor, 50uH				1	
Q301	2008406103	KTC3194/KTC1923Y, NPN				1	

Ref. No.	Part No.	Description				Q'ty	Version
Q302	2208606108	KTC2240BL/BKTC3200, NPN Silicon				1	
Q303	2218211100	FET, 2SK168D				1	
Q304-Q307	2208222105	DTA114YS				4	
Q308 L/R	2208606104	KTC1815Y/BKTC3198, NPN Silicon				2	
Q309 L/R	2208606112	KTD1302B, NPN Silicon				2	
Q310	2208222105	DTA114YS				1	
R301	3069623970	Carbon Film	62 kohm	1/5W	J	1	D
R301		Jumper					A,C,E,F,Dom
R302	3069104970	Carbon Film	100 kohm	1/5W	J	1	D(Only)
R303	3069561970	Carbon Film	560 ohm	1/5W	J	1	A,Dom
R303	3069561970	Carbon Film	560 ohm	1/5W	J	1	A,Dom
R304	3069181970	Carbon Film	180 ohm	1/5W	J	1	
R305	3069332970	Carbon Film	3.3 kohm	1/5W	J	1	
R306	3069471970	Carbon Film	560 ohm	1/5W	J	1	A,Dom
R306	3069331970	Carbon Film	330 ohm	1/5W	J	1	B,C,D,E,F
R307/R308	3069331970	Carbon Film	330 ohm	1/5W	J	2	
R309	3069561970	Carbon Film	560 ohm	1/5W	J	1	
R310/R311	3069181970	Carbon Film	180 ohm	1/5W	J	2	
R312	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R313	3069332970	Carbon Film	3.3 kohm	1/5W	J	1	
R314	3069183970	Carbon Film	18 kohm	1/5W	J	1	
R315	3069331970	Carbon Film	330 ohm	1/5W	J	1	
R316	3069683970	Carbon Film	68 kohm	1/5W	J	1	
R317	3069273970	Carbon Film	27 kohm	1/5W	J	1	
R318/R319	3069104970	Carbon Film	100 kohm	1/5W	J	2	
R320	3069432970	Carbon Film	4.3 kohm	1/5W	J	1	
R321	3069243970	Carbon Film	24 kohm	1/5W	J	1	
R322	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R323	3069820970	Carbon Film	82 ohm	1/5W	J	1	
R324	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R325	3069273970	Carbon Film	27 kohm	1/5W	J	1	B,C,D,E,F
R325	3069273970	Carbon Film	27 kohm	1/5W	J	1	B,C,D,E,F
R325		Jumper					A,Dom
R326	3069104970	Carbon Film	100 kohm	1/5W	J	1	
R327	3069272970	Carbon Film	2.7 kohm	1/5W	J	1	
R328	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R329/R330	3069271970	Carbon Film	270 ohm	1/5W	J	2	
R331 L/R	3069184970	Carbon Film	180 kohm	1/5W	J	2	A,Dom
R331 L/R	3069274970	Carbon Film	270 kohm	1/5W	J	2	B,C,D,E,F
R332 L/R	3069154970	Carbon Film	150 kohm	1/5W	J	2	A,Dom
R332 L/R	3069184970	Carbon Film	180 kohm	1/5W	J	2	B,C,D,E,F
R333 L/R	3069332970	Carbon Film	3.3 kohm	1/5W	J	2	
R334 L/R	3069432970	Carbon Film	4.3 kohm	1/5W	J	2	
R335 L/R	3069332970	Carbon Film	3.3 kohm	1/5W	J	2	
R336	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R337	3069152970	Carbon Film	1.5 kohm	1/5W	J	1	
R338	3069820970	Carbon Film	82 ohm	1/5W	J	1	
R339	3069821970	Carbon Film	820 ohm	1/5W	J	1	
R340/R341	3069331970	Carbon Film	330 ohm	1/5W	J	2	
R342/R343	3069472970	Carbon Film	4.7 kohm	1/5W	J	2	
R344/R345	3069103970	Carbon Film	10 kohm	1/5W	J	2	
R346-R348	3069101970	Carbon Film	100 ohm	1/5W	J	3	
R349	3069331970	Carbon Film	330 ohm	1/5W	J	1	
R351 L/R	3069102970	Carbon Film	1 kohm	1/5W	J	2	
R352	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R353 L/R	3069102970	Carbon Film	1 kohm	1/5W	J	2	
R355/R356	3069220970	Carbon Film	22 ohm	1/5W	J	2	
R359 L/R	3069220970	Carbon Film	22 ohm	1/5W	J	2	
R360 L/R	3069220970	Carbon Film	22 ohm	1/5W	J	2	
R361	3069182970	Carbon Film	1.8 kohm	1/5W	J	1	A,Dom
R361		Jumper					B,C,D,E,F
R363	3069104970	Carbon Film	100 kohm	1/5W	J	1	
R364L/R	3069102970	Carbon Film	1 kohm	1/5W	J	2	
R365	3069102970	Carbon Film	1 kohm	1/5W	J	1	

Ref. No.	Part No.	Description				Q'ty	Version
R366 L/R	3069102970	Carbon Film	1 kohm	1/5W	J	2	
R367/R368	3069331970	Carbon Film	330 ohm	1/5W	J	2	
TC301	3838001160	Capacitor Trimmer 20P	20 pF	50V	J	1	
TC302	3838001150	Capacitor Trimmer 10P	10 pF	50V	D	1	
VD301/VD302	2058819106	Varactor, KV1236Z				2	
VR301/VR302	3248050343	RES Semi, EVN-DCAA03B54				2	
VR303	3248020443	RES Semi, EVM-DCAA03B25				1	
X-TAL	3908011001	Resonator 7.200MHz				1	
P1-1	**054011010076**	**Ass'y P.C.B Dolby**					
C401 L/R	3479222971	Electrolytic SA	2.2 uF	50 V	M	2	
C402 L/R	3479210071	Electrolytic SA	10 uF	50 V	M	2	
C403 L/R	3479210071	Electrolytic SA	10 uF	50 V	M	2	
C404/C405	3479247041	Electrolytic SA	47 uF	25 V	M	2	
C406	3479347121	Electrolytic SG	470 uF	10 V	M	1	
C407	3679104120	Mylar	0.1 uF	100 V	J	1	
C408	3479347121	Electrolytic SG	470 uF	10 V	M	1	
C409-C412	3679104120	Mylar	0.1 uF	100 V	J	4	
C413/C414	3579681130	Ceramic Disc	680 pF	50 V	J	2	
C415	3479247971	Electrolytic SA	4.7 uF	50 V	M	1	
C416/C417	3679224297	Mylar	0.22 uF	63 V	K	2	
C418-C421	3679334297	Mylar	0.33 uF	63 V	K	4	
C422	3479310121	Electrolytic SG	100 uF	10 V	M	1	
C423-C426	3679224297	Mylar	0.22 uF	63 V	K	4	
C427	3479210071	Electrolytic SA	10 uF	50 V	M	1	
C428	3679104297	Mylar	0.1 uF	63 V	K	1	
C429	3579352120	Mylar	0.0035 uF	100 V	J	1	
C430-C432	3479210071	Electrolytic SA	10 uF	50 V	M	13	
C433	3679104120	Mylar	0.1 uF	100 V	J	1	
C434	3479310121	Electrolytic SG	100 uF	10 V	M	1	
C435-C437	3679103120	Mylar	0.01 uF	100 V	J	3	
C438	3479210071	Electrolytic SA	10 uF	50 V	M	1	
C439/C440	3679224297	Mylar	0.22 uF	63 V	K	2	
C441	3479247971	Electrolytic SA	4.7 uF	50 V	M	1	
C442/C443	3479247041	Electrolytic SA	47 uF	25 V	M	2	
C444 L/R	3479247971	Electrolytic SA	4.7 uF	50 V	M	2	
C445/C446	3479247041	Electrolytic SA	47 uF	25 V	M	2	
C447	3479233971	Electrolytic SA	3.3 uF	50 V	M	1	
C448/C449	3479247041	Electrolytic SA	47 uF	25 V	M	2	
C450	3479210071	Electrolytic SA	10 uF	50 V	M	1	
C451	3479233971	Electrolytic SA	3.3 uF	50 V	M	1	
C452	3479222971	Electrolytic SA	2.2 uF	50 V	M	1	
C454	3479233971	Electrolytic SA	3.3 uF	50 V	M	1	
C455	3679562120	Mylar	0.0056 uF	100 V	J	1	
C456	3679472120	Mylar	0.0047 uF	100 V	J	1	
C457	3579681130	Ceramic Disc	680 pF	50 V	J	1	
C458/C459	3479210071	Electrolytic SA	10 uF	50 V	M	2	
C460	3579471130	Ceramic Disc	470 pF	50 V	J	1	
C461/C462	3479210071	Electrolytic SA	10 uF	50 V	M	2	
C463	3479210971	Electrolytic SA	1 uF	50 V	M	1	
C464	3479210064	Electrolytic AH	10 uF	35 V	M	1	
C465	3679333120	Mylar	0.033 uF	100 V	J	1	
C466	3679472120	Mylar	0.0047 uF	100 V	J	1	
C467	3679392120	Mylar	0.0039 uF	100 V	J	1	
C468	3679683120	Mylar	0.068 uF	100 V	J	1	
C469	3679224297	Mylar	0.22 uF	63 V	K	1	
C470	3479210071	Electrolytic SA	10 uF	50 V	M	1	
C471	3619121110	Poly	120 pF	50 V	J	1	
C472	3479210071	Electrolytic SA	10 uF	50 V	M	1	
C473	3679154297	Mylar	0.15 uF	63 V	K	1	
C474	3579220130	Ceramic Disc	22 pF	50 V	J	1	
C475	3679223120	Mylar	0.022 uF	100 V	J	1	
C476	3619681110	Poly	180 pF	50 V	J	1	
C477	3479210971	Electrolytic SA	1 uF	50 V	M	1	

Ref. No.	Part No.	Description				Q'ty	Version
C478	3479347121	Electrolytic SG	470 uF	10 V	M	1	
C479	3479210971	Electrolytic SA	1 uF	50 V	M	1	
C480	3619681110	Poly	680 pF	50 V	J	1	
C481	3679223120	Mylar	0.022 uF	100 V	J	1	
C482	3619151110	Poly	150 pF	50 V	J	1	
C483/C484	3479322131	Electrolytic SG	220 uF	16 V	M	2	
C485	3579104530	Ceramic Disc	0.1 uF	50 V	Z	1	
C486	3479322131	Electrolytic SG	220 uF	16 V	M	1	
C487	3479210971	Electrolytic SA	1 uF	50 V	M	1	
C488	3479310121	Electrolytic SG	100 uF	10 V	M	1	
C489	3479322131	Electrolytic SG	220 uF	16 V	M	1	
C490/C491	3479247041	Electrolytic SA	47 uF	25 V	M	2	
C492 L/R	3479210971	Electrolytic SA	1 uF	50 V	M	2	
C493 L/R	3679102120	Mylar	0.001 uF	100 V	J	2	
C494 L/R	3479210071	Electrolytic SA	10 uF	50 V	M	2	
C495/C496	3479247041	Electrolytic SA	47 uF	25 V	M	2	
C497 L/R	3479210971	Electrolytic SA	1 uF	50 V	M	2	
C499 L/R	3679102120	Mylar	0.001 uF	100 V	J	2	
C501 L/R	3479210071	Electrolytic SA	10 uF	50 V	M	2	
C502/C503	3479247041	Electrolytic SA	47 uF	25 V	M	2	
C504 L/R	3479247041	Electrolytic SA	47 uF	25 V	M	2	
C505/C506	3479247041	Electrolytic SA	47 uF	25 V	M	2	
C507	3479210071	Electrolytic SA	10 uF	50 V	M	1	
C508	3679104297	Mylar	0.1 uF	63 V	K	1	
C509	3579104530	Ceramic Disc	0.1 uF	50 V	Z	1	
CNT104	436205403332	Lead Ass'y 5P 400mm				1	
CNT401	436207353332	Lead Ass'y 7P 350mm				1	
CNT402-P	4428525540	Wafer 4P				1	
CNT403	436204203332	Lead Ass'y 4P 200mm				1	
CNT404	436403203232	Lead Ass'y 3P 200mm				1	
CNT422-P	4428525540	Wafer 4P				1	
CNT704-P	4428525310	Wafer 12P				1	
D401-D403	2058322101	1N4148M, Switching				3	
D405	2058322101	1N4148M, Switching				1	
D415J	2058322101	1N4148M, Switching				1	
D449	2058322101	1N4148M, Switching				1	
DZ401/DZ402	2258599105	Zener, UZ 6.2BSB				2	
DZ403	2258599116	Zener, UZ 12.0BSC				1	
IC401	2168206104	KIA75559P, OP Amp				1	
IC402	2138001101	IC, GD4066B				1	
IC403	2168206104	KIA75559P, OP Amp				1	
IC404	2138009115	IC, MC14094				1	
IC405	2168017142	LV-1000N, Dolby Pro-Logic				1	
IC406	2168206104	KIA75559P, OP Amp				1	
IC407	2138001101	IC, GD4066B				1	
IC408	2138007124	TC9176P				1	
IC409/IC410	2168206104	KIA75559P, OP Amp				2	
IC411	2168000122	SSM-2126A				1	
IC412	2138001101	IC, GD4066B				1	
IC413	2138401191	IC, DRAM GM71C256A-80				1	
IC414	2138009115	IC, MC14094				1	
J401	3069220970	Carbon Film	22 ohm	1/5W	J	1	
J415	2058322101	1N4148M, Switching				1	
J441	3069102970	Carbon Film	1 kohm	1/5W	J	1	
J451	3069102970	Carbon Film	1 kohm	1/5W	J	1	
J461	3069302970	Carbon Film	3 kohm	1/5W	J	1	
NOSILK	3069183970	Carbon Film	18K ohm	1/5W	J	1	
Q401	2208606104	KTC1815Y/BKTC3198, NPN Silicon				1	
Q402	2208622106	DTC114YS				1	
Q403	2208222105	DTA114YS				1	
Q405	2208606104	KTC1815Y/BKTC3198, NPN Silicon				1	
Q406/Q407	2208606112	KTD1302B, NPN Silicon				2	
Q408	2208606104	KTC1815Y/BKTC3198, NPN Silicon				1	
Q409	2208606112	KTD1302B, NPN Silicon				1	

Ref. No.	Part No.	Description				Q'ty	Version
Q410	2208622106	DTC114YS				1	
Q411	2208206105	KTA1015Y/BKTA1266, PNP				1	
Q412/Q413	2208622106	DTC114YS				2	
Q414/Q415	2208222105	DTA114YS				2	
R401	3069151970	Carbon Film	150 ohm	1/5W	J	1	
R401J	3069220970	Carbon Film	22 ohm	1/5W	J	1	
R402	3069472970	Carbon Film	4.7 kohm	1/5W	J	1	
R403/R404	3069101970	Carbon Film	100 ohm	1/5W	J	2	
R405 L/R	3069104970	Carbon Film	100 kohm	1/5W	J	2	
R407 L/R	3069104970	Carbon Film	100 kohm	1/5W	J	2	
R408/R409	3029151470	Metal Film	150 ohm	1W	J	2	
R410	3069752970	Carbon Film	7.5 kohm	1/5W	J	1	
R411	3069473970	Carbon Film	47 kohm	1/5W	J	1	
R412	3069153970	Carbon Film	15 kohm	1/5W	J	1	
R413	3069752970	Carbon Film	7.5 kohm	1/5W	J	1	
R414	3069473970	Carbon Film	47 kohm	1/5W	J	1	
R415	3069153970	Carbon Film	15 kohm	1/5W	J	1	
R416	3069391970	Carbon Film	390 ohm	1/5W	J	1	
R417	3069104970	Carbon Film	100 kohm	1/5W	J	1	
R418-R420	3069223970	Carbon Film	22 kohm	1/5W	J	3	
R421	3069106970	Carbon Film	10M ohm	1/5W	J	1	
R422/R423	3069101970	Carbon Film	100 ohm	1/5W	J	2	
R426	3069472970	Carbon Film	4.7 kohm	1/5W	J	1	
R427	3069332970	Carbon Film	3.3 kohm	1/5W	J	1	
R428	3069302970	Carbon Film	3 kohm	1/5W	J	1	
R429	3069392970	Carbon Film	3.9 kohm	1/5W	J	1	
R430	3069242970	Carbon Film	2.4 kohm	1/5W	J	1	
R431	3069152970	Carbon Film	1.5 kohm	1/5W	J	1	
R432/R433	3069101970	Carbon Film	100 ohm	1/5W	J	2	
R434	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R435	3069223970	Carbon Film	22 kohm	1/5W	J	1	
R435 L/R	3069103970	Carbon Film	10 kohm	1/5W	J	2	
R436	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R436 L/R	3069223970	Carbon Film	22 kohm	1/5W	J	2	
R437	3069223970	Carbon Film	22 kohm	1/5W	J	1	
R438	3069152970	Carbon Film	1.5 kohm	1/5W	J	1	
R439	3069242970	Carbon Film	2.4 kohm	1/5W	J	1	
R440	3069152970	Carbon Film	1.5 kohm	1/5W	J	1	
R441J	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R442	3069302970	Carbon Film	3 kohm	1/5W	J	1	
R443	3069392970	Carbon Film	3.9 kohm	1/5W	J	1	
R444	3069242970	Carbon Film	2.4 kohm	1/5W	J	1	
R445	3069152970	Carbon Film	1.5 kohm	1/5W	J	1	
R446	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R447	3069104970	Carbon Film	100 kohm	1/5W	J	1	
R449	3069392970	Carbon Film	3.9 kohm	1/5W	J	1	
R450	3069104970	Carbon Film	100 kohm	1/5W	J	1	
R451	3069393970	Carbon Film	39 kohm	1/5W	J	1	
R451J	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R452	3069183970	Carbon Film	18 kohm	1/5W	J	1	
R453	3069822970	Carbon Film	8.2 kohm	1/5W	J	1	
R454	3069153970	Carbon Film	15 kohm	1/5W	J	1	
R455	3069473970	Carbon Film	47 kohm	1/5W	J	1	
R456	3069332970	Carbon Film	3.3 kohm	1/5W	J	1	
R457	3069105970	Carbon Film	1 M ohm	1/5W	J	1	
R458	3069822970	Carbon Film	8.2 kohm	1/5W	J	1	
R459	3029560470	Metal Film	56 ohm	1W	J	1	
R460	3069182970	Carbon Film	1.8 kohm	1/5W	J	1	
R461	3069223970	Carbon Film	22 kohm	1/5W	J	1	
R462/R463	3069221970	Carbon Film	220 ohm	1/5W	J	2	
R464/R165	3069101970	Carbon Film	100 ohm	1/5W	J	2	
R466	3069471970	Carbon Film	470 ohm	1/5W	J	1	
R466 L/R	3069681970	Carbon Film	680 ohm	1/5W	J	2	
R467 L/R	3069105970	Carbon Film	1 M ohm	1/5W	J	2	

Ref. No.	Part No.	Description				Q'ty	Version
R468 L/R	3069682970	Carbon Film	6.8 kohm	1/5W	J	2	
R470/R471	3069182970	Carbon Film	1.8 kohm	1/5W	J	2	
R472 L/R	3069202970	Carbon Film	2 kohm	1/5W	J	2	
R474/R475	3069101970	Carbon Film	100 ohm	1/5W	J	2	
R476 L/R	3069681970	Carbon Film	680 ohm	1/5W	J	2	
R477 L/R	3069105970	Carbon Film	1 M ohm	1/5W	J	2	
R478/R479	3069472970	Carbon Film	4.7 kohm	1/5W	J	2	
R480 L/R	3069202970	Carbon Film	2 kohm	1/5W	J	2	
R481	3069302970	Carbon Film	3 kohm	1/5W	J	1	
R481 L/R	3069681970	Carbon Film	680 ohm	1/5W	J	2	
R482	3069392970	Carbon Film	3.9 kohm	1/5W	J	1	
R483	3069152970	Carbon Film	1.5 kohm	1/5W	J	1	
R485	3069472970	Carbon Film	4.7 kohm	1/5W	J	1	
R488-R490	3069332970	Carbon Film	3.3 kohm	1/5W	J	3	
R492/R493	3069104970	Carbon Film	100 kohm	1/5W	J	2	
R494	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R495	3069183970	Carbon Film	18 kohm	1/5W	J	1	
R496	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R497	3069104970	Carbon Film	100 kohm	1/5W	J	1	
R501	3069392970	Carbon Film	3.9 kohm	1/5W	J	1	
R502	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R503/R504	3069682970	Carbon Film	6.8 kohm	1/5W	J	2	
R505	3069182970	Carbon Film	1.8 kohm	1/5W	J	1	
R506 L	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R507/R508	3069204970	Carbon Film	220 kohm	1/5W	J	2	
R509	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R510	3069472970	Carbon Film	4.7 kohm	1/5W	J	1	
R511	3069473970	Carbon Film	47 kohm	1/5W	J	1	
R512	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R513	3069562970	Carbon Film	5.6 kohm	1/5W	J	1	
R514	3069473970	Carbon Film	47 kohm	1/5W	J	1	
VR401	3248010353	RES Semi, EVN-DCAA03B14				1	
X-TAL401	3938131590	Resonator, CST8.00MTW				1	
P2-1	**054011010077**	**Ass'y P.C.B Power Supply**					
45	⚠ 4448102710	Outlet, 3P				1	A,B
	⚠ 4448103610	Outlet, 1P				1	Dom
	⚠ 4448103610	Outlet, 1P				1	
47	7505206210	H/Sink, Reg.				1	
	4228001410	Pin Solder				2	
	4255001010	Clip Fuse				6	
C551	3549472407	Ceramic Disc	0.0047 uF	400 V	J	1	
C552/C553	3679333120	Mylar	0.033 uF	100 V	J	2	
C554	3479322131	Electrolytic SG	220 uF	16 V	M	1	
C555	3479210971	Electrolytic SA	1 uF	50 V	M	1	
C556	3479310171	Electrolytic SG	100 uF	50 V	M	1	
C557-C561	3679472120	Mylar	0.0047 uF	100 V	J	5	
C562	3419533294	Electrolytic SA	3300 uF	40 V		1	
C563	3409322269	Electrolytic SG	2200 uF	35 V		1	
CNT501	436105303331	Lead Ass'y 5P 300mm				1	
CNT502	436204203332	Lead Ass'y 4P 200mm				1	
CNT705-P	4428516610	Wafer 7P				1	
CNT805-P	4428516710	Wafer 8P				1	
D551-D554	2258100135	1N4002, Rectifier				4	
D556/D557	2258100135	1N4002, Rectifier				2	
D559/D560	2258599109	Zener, UZ 15.0BSC				2	
D561-D564	2058100136	1N5402, Rectifier				4	
D565	2258599103	Zener, UZ 5.1BSB				1	
D566	2258100135	1N4002, Rectifier				1	
D598	2258599130	Zener, UZ 7.5BSC				1	
D599	2258599109	Zener, UZ 15.0BSC				1	
F551/552	5508102821	Fuse, SB 3.5A 125 V 20mm				2	A
	5508102730	Fuse, SB 3.15A 250 V				2	B
	5508302735	Fuse, T 3.15 A 250 V				2	C,D,E,F

Ref. No.	Part No.	Description	Q'ty	Version
	⚠ 5508102830	Fuse, SB 3.5 A 250 V	2	Dom
F553	⚠ 5508103121	Fuse, SB 6A 125 V	1	A
	⚠ 5508103130	Fuse, SB 6 A 250 V	1	B
	⚠ 5508302735	Fuse, T 3.15 A 250 V	1	C,D,E,F
	⚠ 5508103330	Fuse, NB 7 A 250 V	1	Dom
F554	⚠ 5508201421	Fuse, SB 315mA 125 V	1	A
	⚠ 5508201430	Fuse, NB 315mA 250 V	1	B
	⚠ 5508301434	Fuse, T315mA 250 V	1	C,D,E,F
	⚠ 5508201430	Fuse, NB 315mA 250 V	1	Dom
F555	⚠ 5508302535	Fuse, T2.5 A 250 V	1	D
F556	⚠ 5508102730	Fuse, SB 3.15 A 250 V	1	B
IC551	2168601110	GD7806, Regulator	1	
PLUG551	4428525780	Wafer, AC 2P	1	
PLUG552	4428525800	Wafer, AC 4P	1	
PLUG553	4428525790	Wafer AC 3P	1	B,PT INDO
PLUG553	4428505710	Wafer 3P	1	
Q551	2208606114	MPSA06Y, NPN Silicon	1	
R551	3029100472	Metal Film 10 ohm 1W J	1	
R552	3069202970	Carbon Film 2 kohm 1/5W J	1	
R553	3029331472	Metal Film 330 ohm 1W J	1	
R554	3069153970	Carbon Film 15 kohm 1/5W J	1	
R555	3029335370	Metal Film 3.3 Mohm 1/2W J	1	A
R556	3069682970	Carbon Film 6.8 kohm 1/5W J	1	
RLY551	5528001640	Relay, OSZ-SS-112DM8	1	
TRANS	⚠ 2828089007	ST/BY Transformer		A
	⚠ 2828072607	ST/BY Transformer		B,Dom,PT INDO
	⚠ 2828069807	ST/BY Transformer		C,D,F
	⚠ 2828069907	ST/BY Transformer		E

P1-2 054011010078 Ass'y P.C.B Tone

57	3208049510	VR Rotary	2	
63	6163113710	Shield Fence	1	
C751 L/R	3579820130	Ceramic Disc 82 pF 50 V J	2	
C752 L/R	3579220130	Ceramic Disc 22 pF 50 V J	2	
C753/C754	3479247041	Electrolytic SA 47 uF 25 V M	2	
C755 L/R	3479210071	Electrolytic SA 10 uF 50 V M	2	
C756 L/R	3479210071	Electrolytic SA 10 uF 50 V M	2	
C757 L/R	3579470130	Ceramic Disc 47 pF 50 V J	2	
C758L/R	3479247971	Electrolytic SA 4.7 uF 50 V M	2	
C759 L/R	3579390130	Ceramic Disc 39 pF 50 V J	2	
C760 L/R	3479210071	Electrolytic SA 10 uF 50 V M	2	
C761/C762	3479247041	Electrolytic SA 47 uF 25 V M	2	
C763 L/R	3479210071	Electrolytic SA 10 uF 50 V M	2	
C764 L/R	3679153120	Mylar 0.015 uF 100 V J	2	
C765 L/R	3679823120	Mylar 0.082 uF 100 V J	2	
C766 L/R	3479222971	Electrolytic SA 2.2 uF 50 V M	2	
C767 L/R	3679182120	Mylar 0.0018 uF 100 V J	2	
C768 L/R	3679123120	Mylar 0.012 uF 100 V J	2	
CNT712	436204358332	Lead Ass'y 4P 350mm	1	
CNT713	436204808332	Lead Ass'y 4P 800mm	1	
IC701/IC702	2168206104	KIA75559P, OP Amp	2	
Q751	2208206105	KTA1015Y/BKTA1266, PNP	1	
Q752	2208622106	DTC114YS	1	
R751 L/R	3069913970	Carbon Film 91 kohm 1/5W J	2	
R752 L/R	3069821970	Carbon Film 820 ohm 1/5W J	2	
R753 L/R	3069472970	Carbon Film 4.7 kohm 1/5W J	2	
R754 L/R	3069561970	Carbon Film 560 ohm 1/5W J	2	
R755 L/R	3069104970	Carbon Film 100 kohm 1/5W J	2	
R756 L/R	3069102970	Carbon Film 1 kohm 1/5W J	2	
R757 L/R	3069913970	Carbon Film 91 kohm 1/5W J	2	
R758 L/R	3069623970	Carbon Film 62 kohm 1/5W J	2	
R759 L/R	3069105970	Carbon Film 1 M ohm 1/5W J	2	
R760/R761	3069101970	Carbon Film 100 ohm 1/5W J	2	
R762 L/R	3069561970	Carbon Film 560 ohm 1/5W J	2	
R763 L/R	3069104970	Carbon Film 100 kohm 1/5W J	2	
R764 L/R	3069223970	Carbon Film 22 kohm 1/5W J	2	
R765 L/R	3069332970	Carbon Film 3.3 kohm 1/5W J	2	
R766 L/R	3069102970	Carbon Film 1 kohm 1/5W J	2	
R767	3069223970	Carbon Film 22 k ohm 1/5W J	1	
R767 L/R	3069362970	Carbon Film 3.6 kohm 1/5W J	2	
R768	3069223970	Carbon Film 22 kohm 1/5W J	1	
R769	3069683970	Carbon Film 68 kohm 1/5W J	1	
R770 L/R	3069622970	Carbon Film 6.2 kohm 1/5W J	2	
R771 L/R	3069122970	Carbon Film 1.2 kohm 1/5W J	2	
R772 L/R	3069123970	Carbon Film 12 kohm 1/5W J	2	
R779	3069151970	Carbon Film 150 kohm 1/5W J	1	
RLY701	5528001020		1	

P1 054011010079 Ass'y P.C.B Front(CPU)

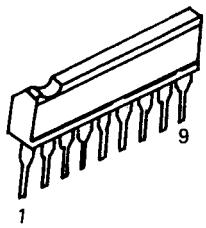
49	675008320	Spacer LED	1	
50	4658003710	SW Tact	40	
51(VCR2)	4628054410	SW Push	1	
	152622101057	Wire Lug #22 100mm LF 0.5	1	
LED701	2308220140	LED, SLC22 VR5	1	
C701	3479210071	Electrolytic SA 10 uF 50 V M	1	
C703	3479233041	Electrolytic SA 33 uF 25 V M	1	
C704	3449347314	CAP FMOH473ZTP16	1	
C705	3479310121	Electrolytic SG 100 uF 10 V M	1	
C706	3579104530	Ceramic Disc 0.1 uF 50 V Z	1	
C707-C714	3579101130	Ceramic Disc 100 pF 50 V J	8	
C715/C716	3579473530	Ceramic Disc 0.047 uF 50 V Z	2	
C717-C721	3579101130	Ceramic Disc 100 pF 50 V J	5	
C722-C730	3579104530	Ceramic Disc 0.1 uF 50 V Z	9	
CNT307-P	4428526285	Wafer FPC 16P	1	
CNT701	436203503332	Lead Ass'y 3P 500mm	1	
CNT704	436212153332	Lead Ass'y 12P 150mm	1	
CNT705	436207353332	Lead Ass'y 7P 350mm	1	
CNT708	436207163332	Lead Ass'y 7P 160mm	1	
CNT702	43620512332	Lead Ass'y 5P 120mm	1	
D701-D714	2058322101	1N4148M, Switching	14	
IC701	2138322166A	CPU, CXP82220-105Q	1	
Q701	2208606104	KTC1815Y/BKTC3198, NPN Silicon	1	
Q702	2208606114	MPSA06Y, NPN Silicon	1	
Q703	2208622106	DTC114YS	1	
R701	3069181970	Carbon Film 180 ohm 1/5W J	1	
R702	3069102970	Carbon Film 1 kohm 1/5W J	1	
R703	3069103970	Carbon Film 10 kohm 1/5W J	1	
R705	3069473970	Carbon Film 47 kohm 1/5W J	1	
R706	3069103970	Carbon Film 10 kohm 1/5W J	1	
R707-R714	3069102970	Carbon Film 1 kohm 1/5W J	8	
R715-R722	3069473970	Carbon Film 47 kohm 1/5W J	8	
R724	3069472970	Carbon Film 4.7 kohm 1/5W J	1	
R725	3069103970	Carbon Film 10 kohm 1/5W J	1	
R726	3069223970	Carbon Film 22 kohm 1/5W J	1	
R727	3069224970	Carbon Film 220 kohm 1/5W J	1	
R728	3069102970	Carbon Film 1 kohm 1/5W J	1	
R729	3069224970	Carbon Film 220 kohm 1/5W J	1	
R732-R739	3069102970	Carbon Film 1 kohm 1/5W J	8	
R740/R741	3069473970	Carbon Film 47 kohm 1/5W J	2	
R742/R743	3069479970	Carbon Film 4.7 ohm 1/5W J	2	
R744/R745	3069181970	Carbon Film 180 ohm 1/5W J	2	
R746	3069332970	Carbon Film 3.3 kohm 1/5W J	1	
R747	3069181970	Carbon Film 180 ohm 1/5W J	1	
R748	3069102970	Carbon Film 1 kohm 1/5W J	1	
Sensor	2408000131	KRM34L1	1	
CNT307	4118616555	Card Cable YS=1.25-16-550-C	1	
FL	2328130301	FIP12 LM8	1	
X-TAL	3938131750	Resonatro, CST10.00MTW	1	

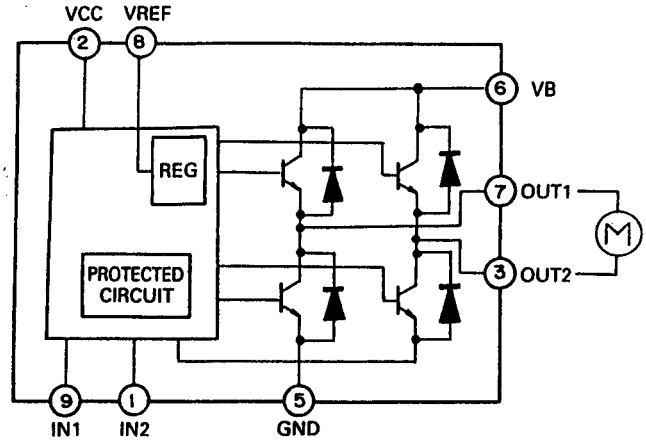
Ref. No.	Part No.	Description				Q'ty	Version
P2-2	**054011010080**	**Ass'y P.C.B Surround**					
	4855000111	Pipe Ceramic 12mm				8	
C366 L/R	3679104120	Mylar	0.1 uF	100 V	J	2	
C801 L/R	3479222971	Electrolytic SA	2.2 uF	50 V	M	2	
C802 L/R	3579222530	Ceramic Disc	0.0022 uF	50 V	J	2	
C803 L/R	3579101130	Ceramic Disc	100 pF	50 V	J	2	
C804 L/R	3479222971	Electrolytic SA	2.2 uF	50 V	M	2	
C805 L/R	3579509030	Ceramic Disc	5 pF	50 V	D	2	
C806 L/R	3479247061	Electrolytic SA	47 uF	35 V	M	2	
C807	3679104120	Mylar	0.1 uF	100 V	J	1	
C808-C811	3479210071	Electrolytic SA	10 uF	50 V	M	4	
C812	3579223530	Ceramic Disc	0.022 uF	50 V	Z	1	
C813 L/R	3479247971	Electrolytic SA	4.7 uF	50 V	M	2	
CNT801	436205353332	Lead Ass'y 5P 350mm				1	
CNT805	436208353332	Lead Ass'y 8P 350mm				1	
D802 L/R	2058322101	1N4148M, Switching				2	
D803 L/R	2058322101	1N4148M, Switching				2	
D804/D805	2258100135	1N4002, Rectifier				2	
IC801	2178317133	STK4122MK2, Hybrid				1	
L301 L/R	2648001010	Coil Inductro, 50uH				2	
NOSILK	3069102970	Carbon Film	1 kohm	1/5W	J	1	
Q801 L/R	2208606104	KTC1815Y/BKTC3198, NPN Silicon				2	
R357 L/R	3069220970	Carbon Film	22 ohm	1/5W	J	2	
R358 L/R	3069220970	Carbon Film	22 ohm	1/5W	J	2	
R359 L/R	3069220970	Carbon Film	22 ohm	1/5W	J	2	
R360 L/R	3069220970	Carbon Film	22 ohm	1/5W	J	2	
R801 L/R	3069102970	Carbon Film	1 kohm	1/5W	J	2	
R802 L/R	3069473970	Carbon Film	47 kohm	1/5W	J	2	
R803 L/R	3069102970	Carbon Film	1 kohm	1/5W	J	2	
R804 L/R	3069473970	Carbon Film	47 kohm	1/5W	J	2	
R805 L/R	3069222270	Carbon Film	2.2 kohm	1/4W	J	2	
L806 L/R	3069132970	Carbon Film	1.3 kohm	1/5W	J	2	
R807	3069100970	Carbon Film	10 ohm	1/5W	J	1	
R808	3069152970	Carbon Film	1.5 kohm	1/5W	J	1	
R809	3069102970	Carbon Film	1 kohm	1/5W	J	1	
R810	3069103970	Carbon Film	10 kohm	1/5W	J	1	
R811	3069394970	Carbon Film	390 kohm	1/5W	J	1	
R812	3069683970	Carbon Film	68 kohm	1/5W	J	1	
R813	3069224970	Carbon Film	220 kohm	1/5W	J	1	
R814	3069472970	Carbon Film	4.7 kohm	1/5W	J	1	
R815L	3069391970	Carbon Film	390 ohm	1/5W	J	1	
R815R	3069391970	Carbon Film	390 ohm	1/5W	J	1	
R816 L/R	3059478572	Cement	0.47 ohm	2W	J	2	
R817 L/R	3069153970	Carbon Film	15 kohm	1/5W	J	2	
R819 L/R	3069223970	Carbon Film	22 kohm	1/5W	J	2	
R820	3069101970	Carbon Film	100 ohm	1/5W	J	1	
P2-5	**054011010081**	**Ass'y P.C.B Headphone**					
53	4438005010	Jack Phone				1	
C861 L/R	3579561130	Ceramic Disc	560 pF	50 V	J	2	FTZ
R861 L/R	3029471570	Metal Film	470 ohm	2W	J	2	
CNT811-P	4428525530	Wafer 3P				1	
P2-3	**054011010082**	**Ass'y P.C.B Balance**					
54	3208052010	VR Rotary				1	
55	4438109810	Jack RCA, 3P				1	
56	6165138210	Shield Fence				1	
	152622102057	Wire Lug # 22 200mm, Black				1	
C873	3579104530	Ceramic Disc	0.1 uF	50 V	Z	1	
C874	3579223530	Ceramic Disc	0.022 uF	50 V	Z	1	
C875	3579104530	Ceramic Disc	0.1 uF	50 V	Z	1	
R871 L/R	3069561970	Carbon Film	560 ohm	1/5W	J	2	
R872 L/R	3069104970	Carbon Film	100K ohm	1/5W	J	2	
CNT802	436204153332	Lead Ass'y 4P 150mm				1	

Ref. No.	Part No.	Description				Q'ty	Version
CNT812	436205408332	Lead Ass'y 5P 400mm				1	
P2-4	**054011010083**	**Ass'y P.C.B Power S/W**					
50	458003710	SW Tact				4	
LED A	2371124701	LED, 34URC				1	
LEDB B	2371124701	LED, 34URC				1	
LED POWER	2371124701	LED, 34URC				1	
CNT708-P	4428525570	Wafer 7P				1	
P3-1	**054010210084**	**Ass'y P.C.B Voltage Selector**					**PT INDO,B**
64(SW901)	4618006510	SW Slide, Voltage Sel. 6P				1	PT INDO,B
65(SW902)	4618006610	SW Slide, Voltage Sel. 3P				1	PT INDO,B
PLUG901	4428525800	Wafer 4P				1	
PLUG902	4428525780	Wafer 2P				1	
PLUG903	4428525790	Wafer 3P				1	
CNT902	4358202160	Wafer AC 2P				1	
CNT903	4358203160	Wafer AC 3P				1	
P1-4	**054011010085**	**Ass'y P.C.B LED**					
LED751	2371124701	LED, SLR-34URCF25				1	
CNT201	4358102184	Lead Ass'y 2P 180mm				1	
	054011010065	**Ass'y P.C.B Remotoe Control**					
IC01	2138326101	IC MN15814				1	
X-TAL	3938101890	CRA455				1	
Q01	2208606112	TR, KTD1302				1	
D01	2408001139	Diode, IR-LED EL-5HIR7				1	
C01	3409247022	CAP, Electrolytic SA	47 uF	10 V	J	1	
C02	3519103935	CAP, Ceramic Tubul	0.01 uF	50 V	J	1	
C04	3519470935	CAP, Ceramic Tubul	47 pF	50 V	J	1	
R01	3069229970	Carbon Film	2.2 ohm	1/5W	J	1	

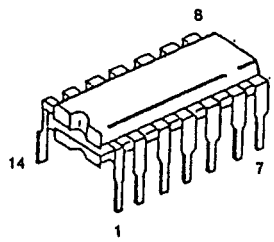
SEMICONDUCTOR LEAD IDENTIFICTION & INTERNAL DIAGRAM

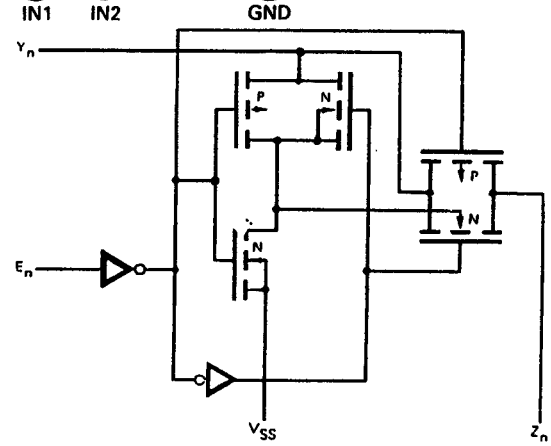
TA7291S: IC251



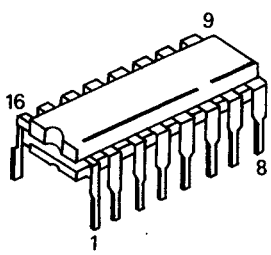


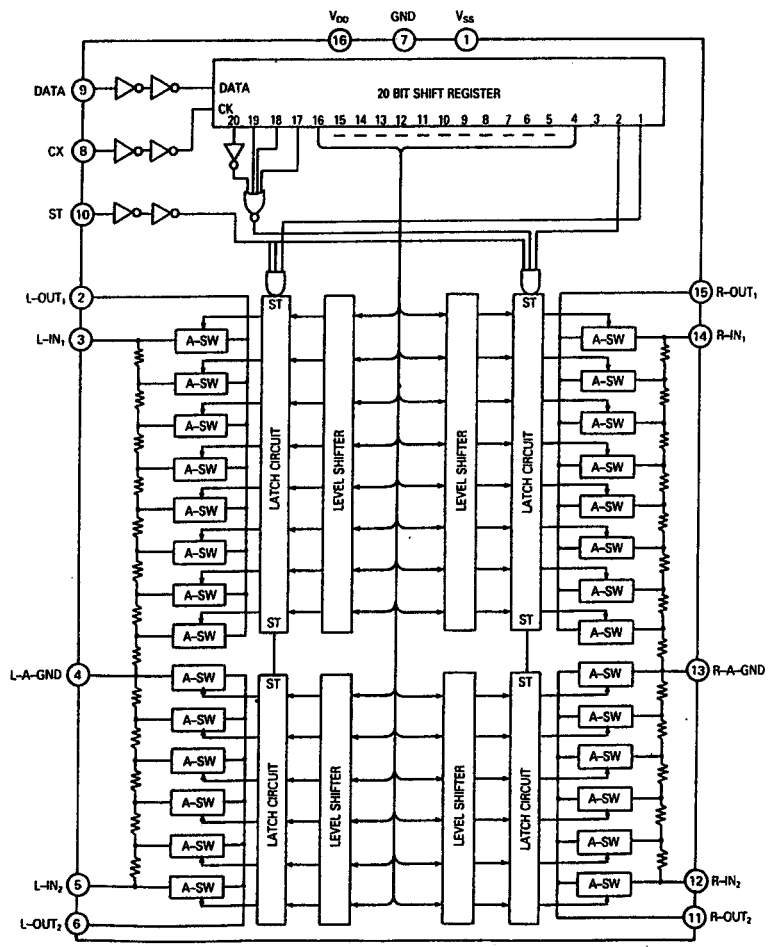
GD4066: IC402, IC407, IC412





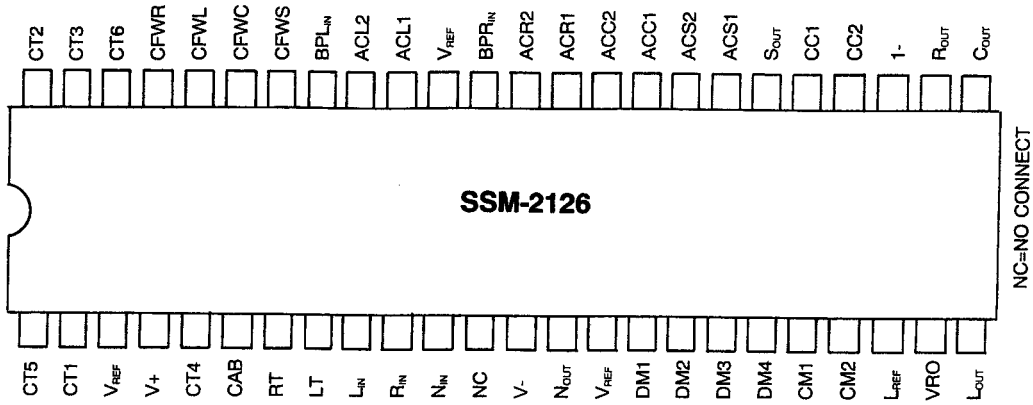
TC9176P: IC408



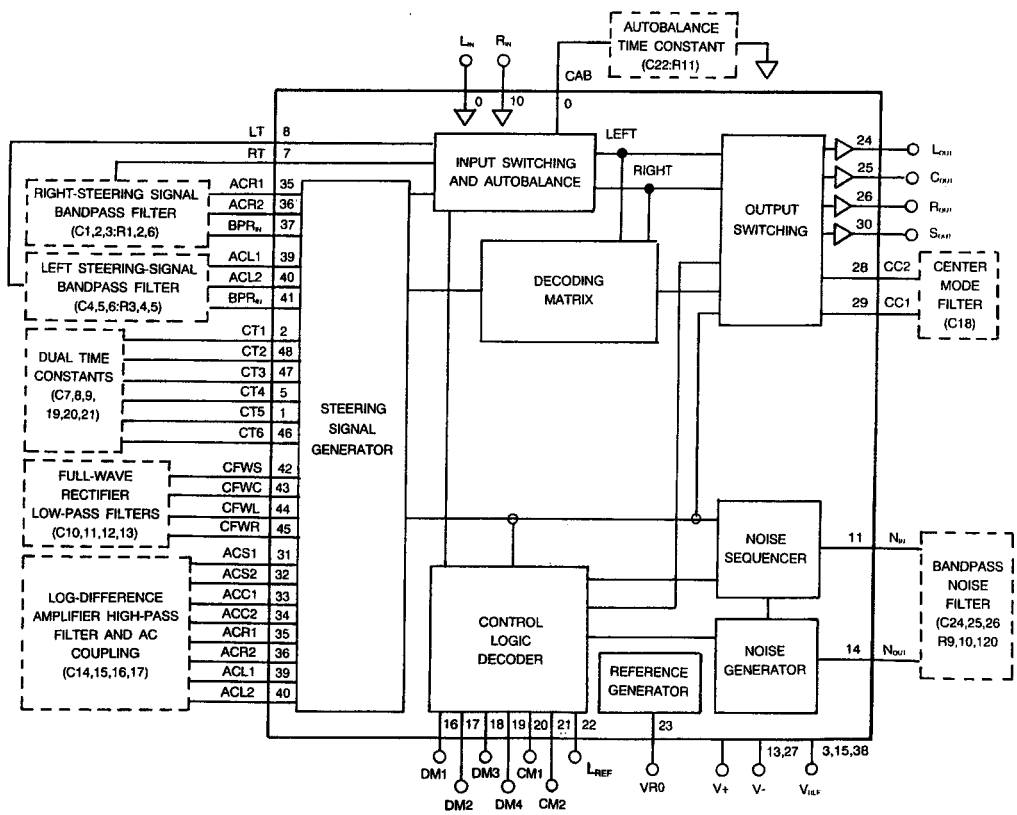


SSM-2126A: IC411

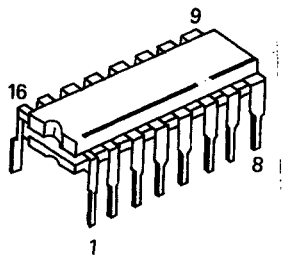
Pin Connections(Top View)

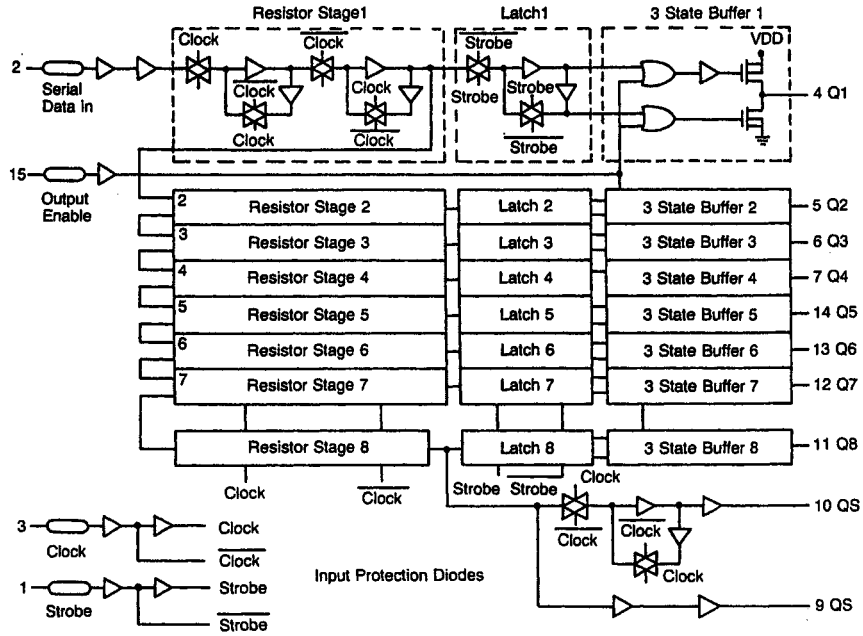

CT2 CT3 CT6 CFWR CFWL CFWC CFWS BPL_IN ACL2 ACL1 V_REF BPR_IN ACR2 ACR1 ACC2 ACC1 ACS2 ACS1 S_OUT CC1 CC2 1- R_OUT C_OUT
SSM-2126
NC=NO CONNECT
CT5 CT1 V_REF V+ CT4 CAB RT LT L_IN R_IN N_IN NC V- N_OUT V_REF DM1 DM2 DM3 DM4 CM1 CM2 L_REF VRO L_OUT

Block Diagram

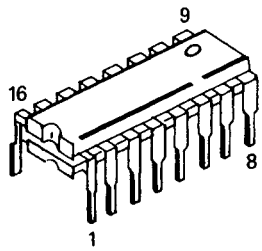

AUTOBALANCE TIME CONSTANT (C22:R11)
CAB
INPUT SWITCHING AND AUTOBALANCE
LEFT
RIGHT
OUTPUT SWITCHING
DECODING MATRIX
CENTER MODE FILTER (C18)
RIGHT-STEERING SIGNAL BANDPASS FILTER (C1,2,3:R1,2,6)
LEFT STEERING-SIGNAL BANDPASS FILTER (C4,5,6:R3,4,5)
DUAL TIME CONSTANTS (C7,8,9, 19,20,21)
FULL-WAVE RECTIFIER LOW-PASS FILTERS (C10,11,12,13)
LOG-DIFFERENCE AMPLIFIER HIGH-PASS FILTER AND AC COUPLING (C14,15,16,17)
STEERING SIGNAL GENERATOR
NOISE SEQUENCER
NOISE GENERATOR
BANDPASS NOISE FILTER (C24,25,26 R9,10,120
CONTROL LOGIC DECODER
REFERENCE GENERATOR
LT RT ACR1 ACR2 BPR_IN ACL1 ACL2 BPR_IN CT1 CT2 CT3 CT4 CT5 CT6 CFWS CFWC CFWL CFWR ACS1 ACS2 ACC1 ACC2 ACR1 ACR2 ACL1 ACL2
DM1 DM2 DM3 DM4 CM1 CM2 L_REF VR0 V+ V- V_ILF

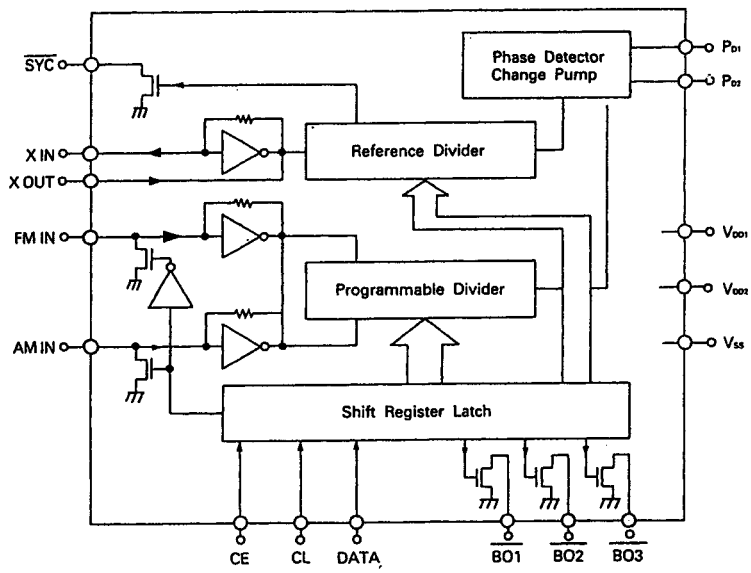
MC14094: IC103, 404, 414



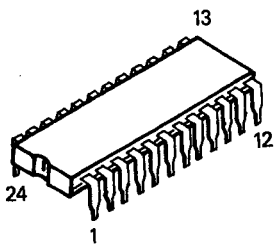


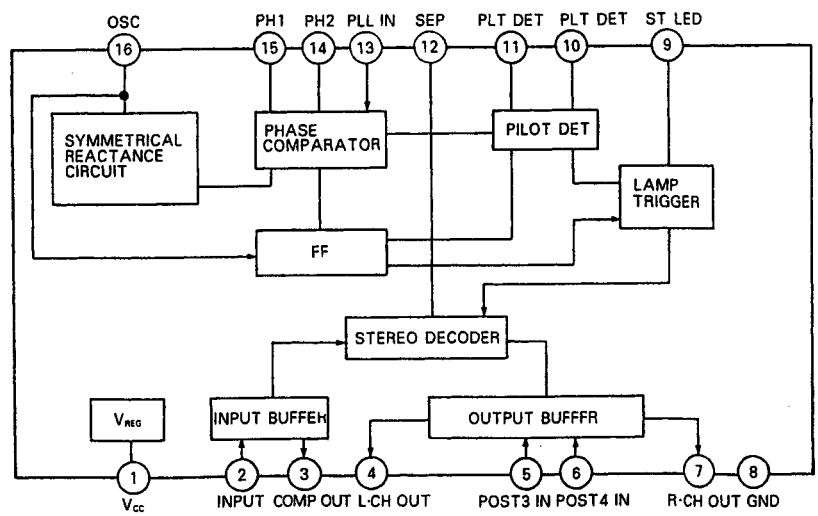
LM7001: IC301



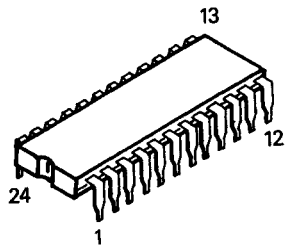


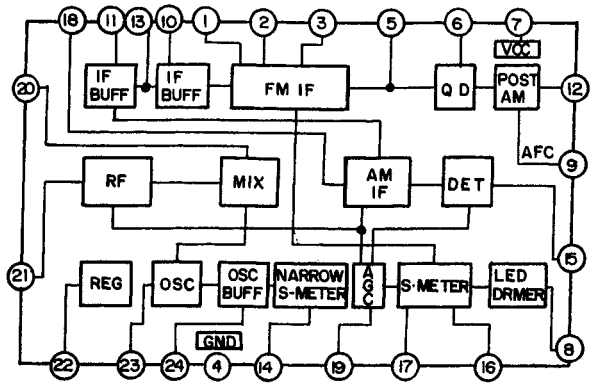
KA2265(Linear Integrated Circuit): IC303



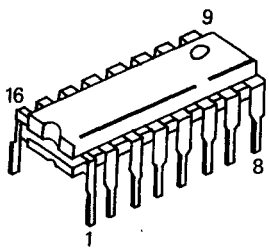


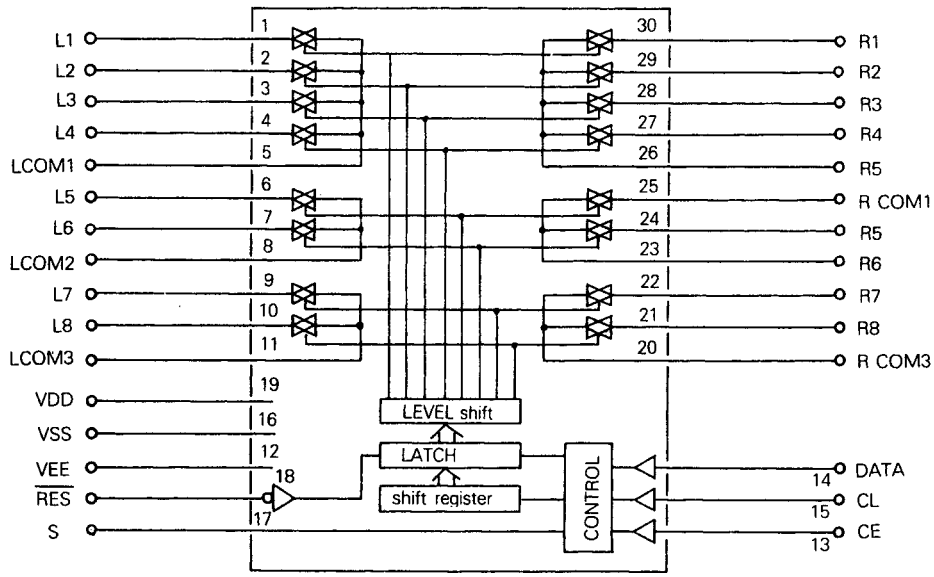
LA1266: IC302



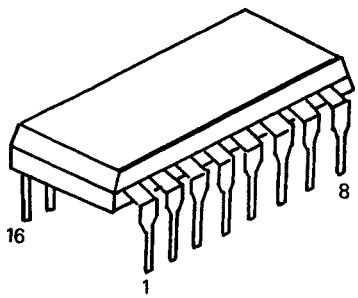


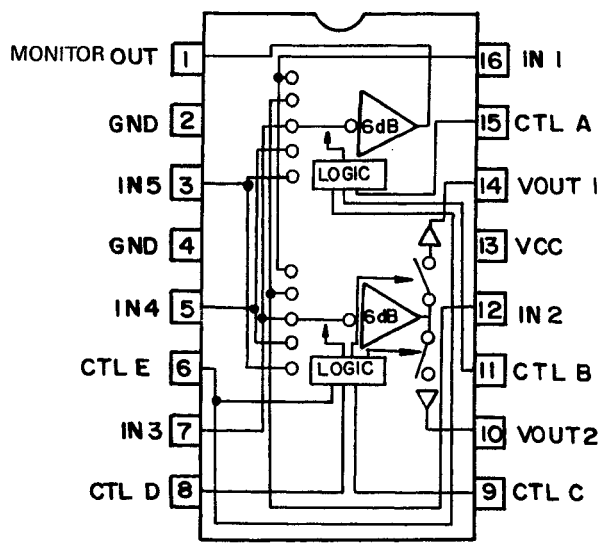
LC7821: IC101, 102



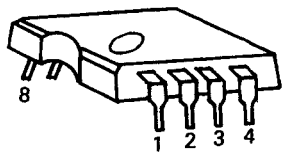


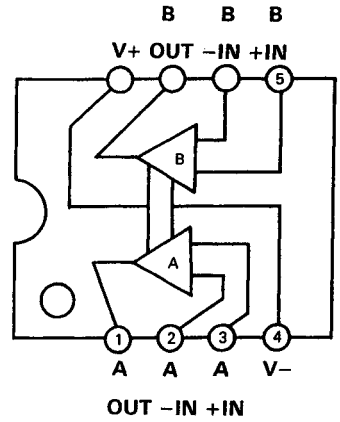
BA7625(Video signal switch for AV Amplifier): IC105



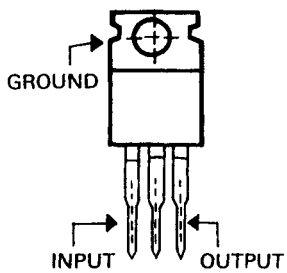


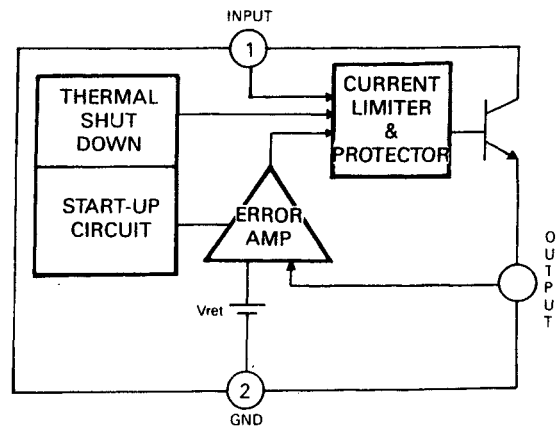
KIA75559P: IC109, 110, 401, 403, 406, 409, 410, 701, 702



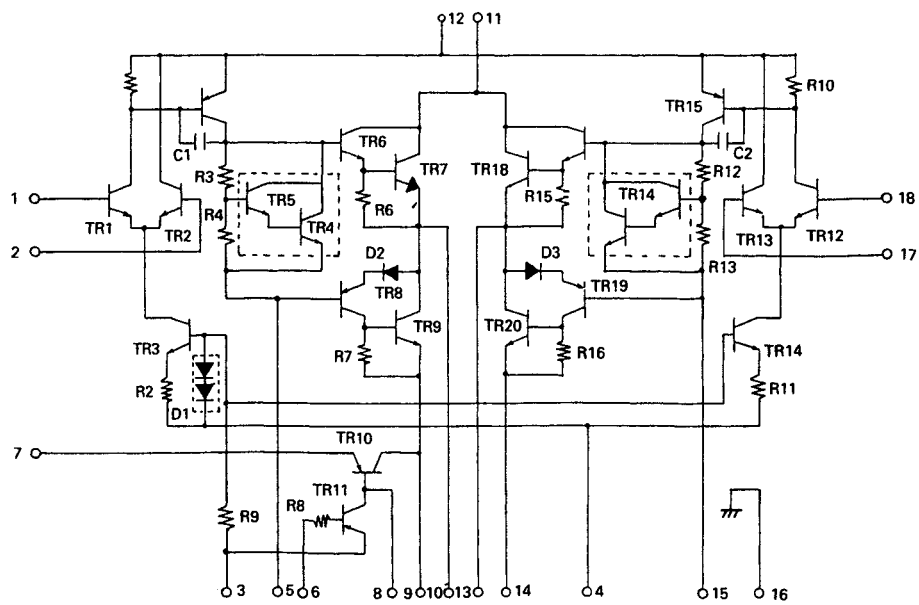


GD78XX: IC107, IC551

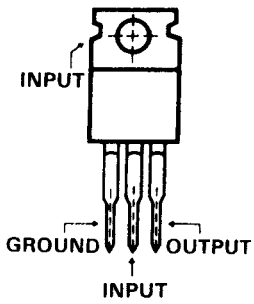


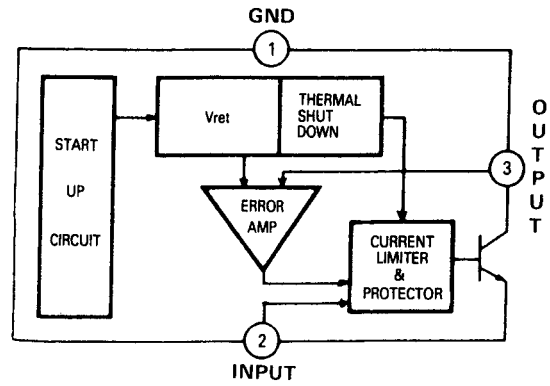


STK4122MK2: IC801

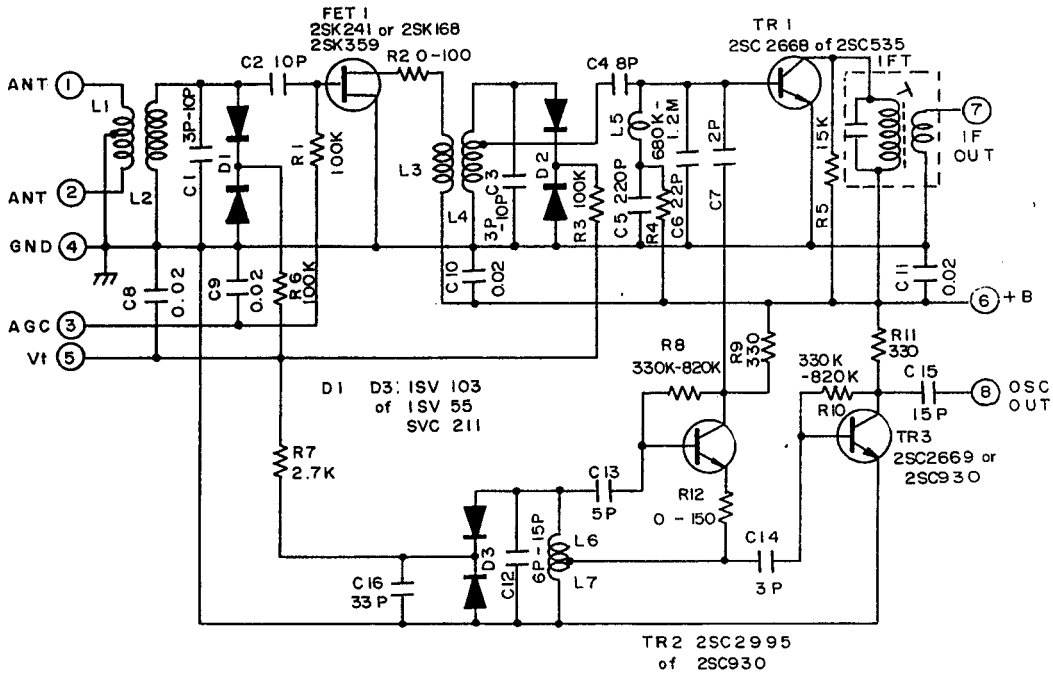


GD79: IC108

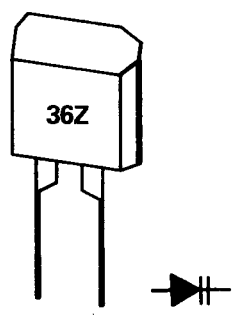




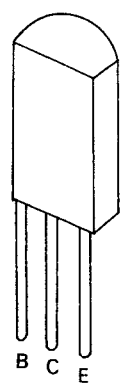
FRONT-END(FE 306-A15): FE301



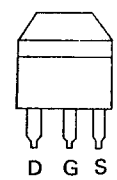
KV1236Z: VD301, VD302



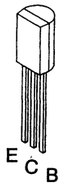
2SK168D: Q303



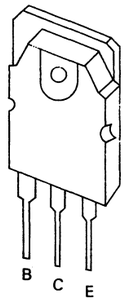
KTC1923Y/KTC3194: Q301



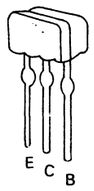
KTA1015Y/BKTA1266: Q105L/R, Q130, Q131 Q132, Q411, Q751
KTC1815Y/BKTC3198: Q108L/R, Q116L/R, Q116C
Q117, Q118, Q119, Q120, Q121, Q122
Q308L/R, Q401, Q405, Q408
Q701, Q801L/R
KTC2229Y/KTC3206: Q110L/R, Q110C
KTC2240/BKTC3200: Q104C, Q105C, Q106L/R
Q106C, Q107L/R, Q107C, Q302
KTD1302B: Q309 L/R, Q406, Q407, Q409



2SC3854: Q114C
2SC3855: Q114L/R
2SA1490: Q115C
2SA1491: Q115L/R

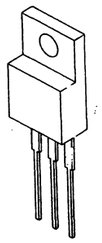


DTA114YS: Q304, Q305, Q306, Q307, Q310
Q403, Q414, Q415
DTC114YS: Q402, Q410, Q412, Q413
Q703, Q752

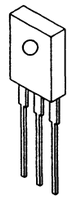


MPSA06Y: Q101, Q111L/R
Q11C, Q169
Q551, Q702

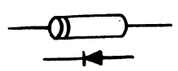
2SA958:Q113L/R
2SC2168:Q112 L/R



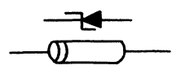
KSA1220A: Q113C



IN4148: D101, D107L/R, D107C, D108C, D109C
D110L/R, D110C, D111, D111L/R, C111C, D112
D113, D117L/R, D117C, D301, D302, D303
D304, D305, D308, D309, D401, D403
D405, D415J, D449, D701, D702, D703
D704, D705, D706, D707, D708, D709
D710, D711, D712, D713, D714, D751
D802L/R, D803L/R
IN4002: D106, D114, D115, D116, D551, D552, D553
D554, D556, D557, D566, D804, D805
IN5402: D561-D564
6A03: D102-D105



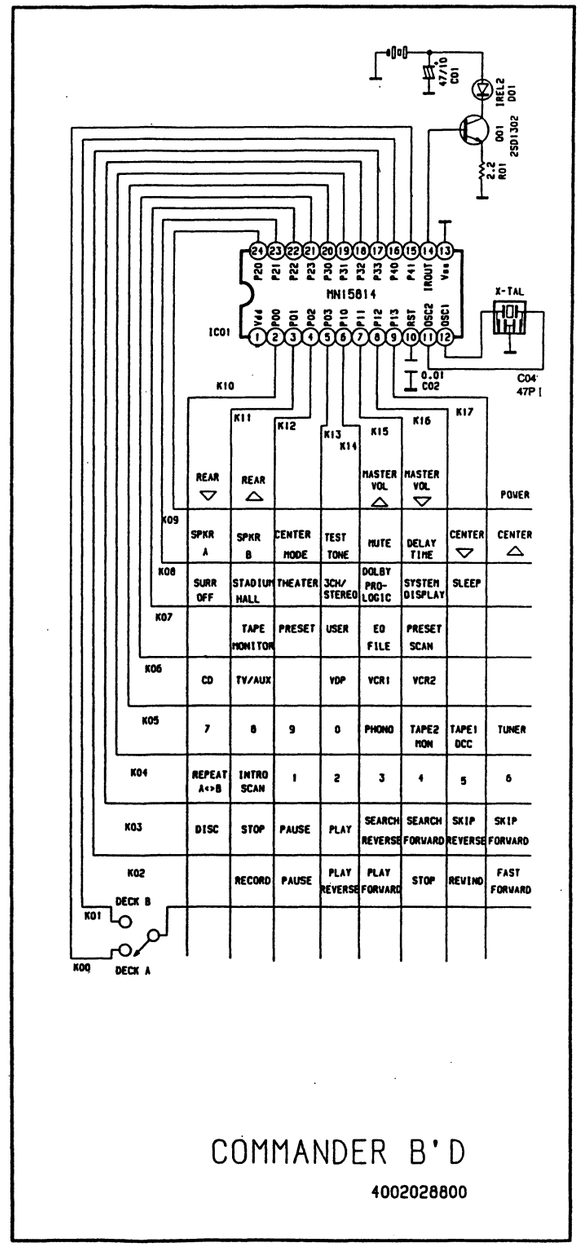
DZ5.1: D306, D565
DZ6.2: DZ401, DZ402
DZ15: D559, D560, D599
DZ27: DZ101C



SCHEMATIC DIAGRAMS

REMOTE CONTROL UNIT

Model No.: RV-6030R

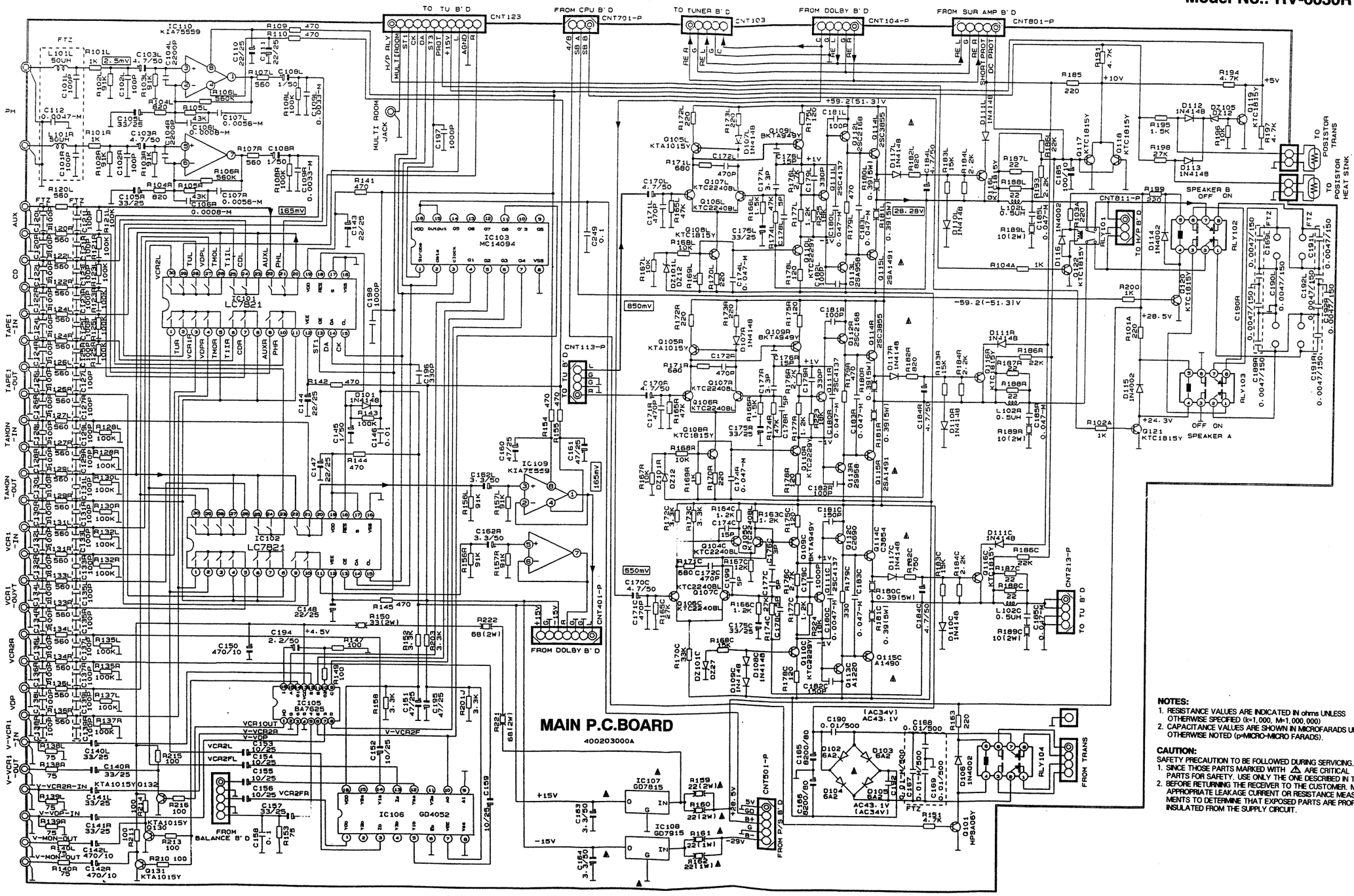


COMMANDER B'D

4002028800

MAIN SECTION

Model No.: RV-6030R



NOTES:

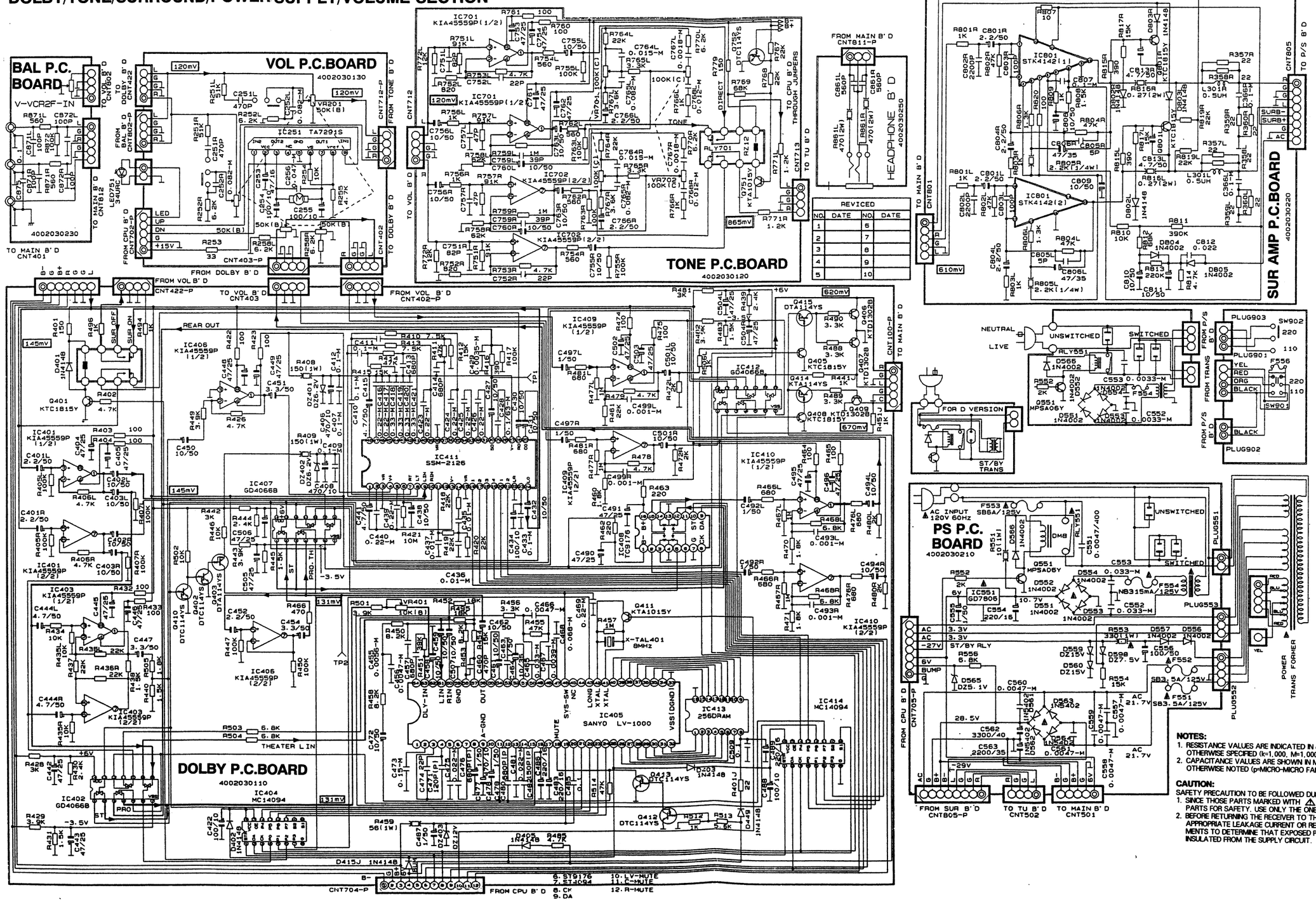
1. RESISTANCE VALUES ARE INDICATED IN ohms UNLESS OTHERWISE SPECIFIED (k=1,000, M=1,000,000)
2. CAPACITANCE VALUES ARE SHOWN IN MICROFARADS UNLESS OTHERWISE NOTED (p=MICRO-MICRO FARADS).

CAUTION:

SAFETY PRECAUTION TO BE FOLLOWED DURING SERVICING.

1. SINCE THOSE PARTS MARKED WITH ⚠ ARE CRITICAL PARTS FOR SAFETY. USE ONLY THE ONE DESCRIBED IN THE PARTS LIST.
2. BEFORE RETURNING THE RECEIVER TO THE CUSTOMER, MAKE APPROPRIATE LEAKAGE CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE PROPERLY INSULATED FROM THE SUPPLY CIRCUIT.

DOLBY/TONE/SURROUND/POWER SUPPLY/VOLUME SECTION



NOTES:

1. RESISTANCE VALUES ARE INDICATED IN ohms UNLESS OTHERWISE SPECIFIED (k=1,000, M=1,000,000)
2. CAPACITANCE VALUES ARE SHOWN IN MICROFARADS UNLESS OTHERWISE NOTED (p=MICRO-MICRO FARADS).

CAUTION:

SAFETY PRECAUTION TO BE FOLLOWED DURING SERVICING.

1. SINCE THOSE PARTS MARKED WITH ⚠ ARE CRITICAL PARTS FOR SAFETY. USE ONLY THE ONE DESCRIBED IN THE PARTS LIST.
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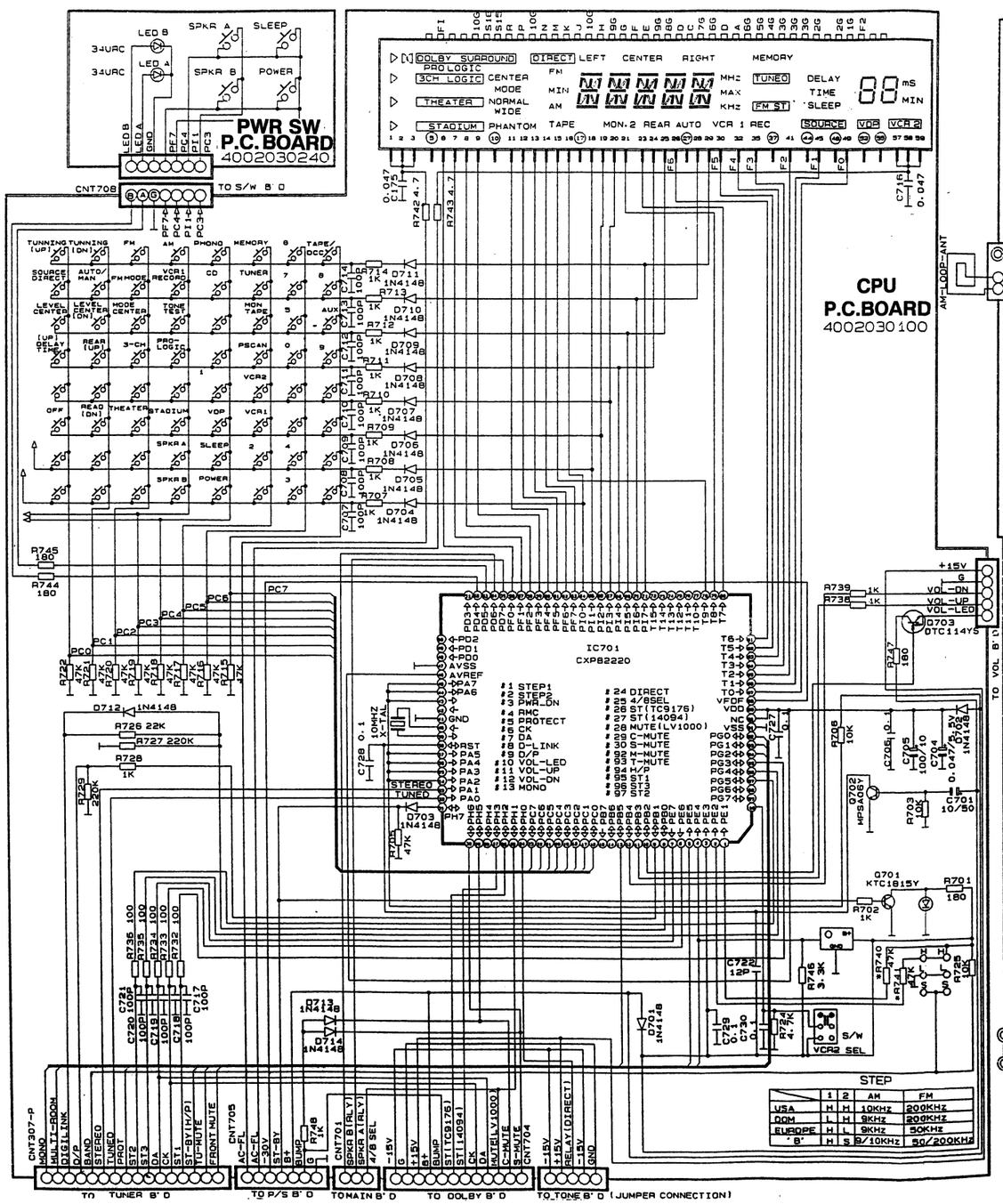
TUNER AND CPU (FRONT) SECTION



AREA / NO	KS (220V)	A (120V)	C.D.F (230V)	F (240V)	B (110,120/220V)
F301	N85A	N85A	F5A	F5A	N85A
F302 F303	SB3.15A	SB2A	F3.15A	F3.15A	N83A

REMARK AREA / NO	USA/CANADA (KS)	GENERAL EXPORT (A, C, F, B)	EUROPE (D)
*FE301	FE306-A15	FE306-A15	FE407-G60
*R301	JUMPER	JUMPER	62K
*R302	-	-	100K
*R303	560	-	-
*CF1. CR2	10.7MA8	10.7MS3G	10.7MS3G
*R306	560	330	330
*R314	18K	47K	47K
*C314	2.2/50	1/50	1/50
*C318	-	-	82P
*C319	-	-	100P
*L308	-	-	20.8mH
*C349. C350	33P(CH)	33P(CH)	47P(CH)
*VR302	50K	50K	100K
*C340L/R	390P(P)	180P(P)	180P(P)
*R325	-	27K	27K
*R323	1.8K	JUMPER	JUMPER
*R331L/R	180K	270K	270K
*R332L/R	150K	180K	180K

VERSION	VT(TP1)
UL/USA	FM 1.5V-8.3V AM 1.2V-9.0V
EUROPE AUS	FM 1.5V-8.4V AM 1.2V-8.6V
KOREA	FM 1.5V-8.3V AM 1.2V-8.6V

	1	2	AM	FM
USA	H	H	10KHz	200KHz
DOM	L	H	9KHz	200KHz
EUROPE	H	L	9KHz	50KHz
'B'	H	S	9/10KHz	50/200KHz

NOTES:
1. RESISTANCE VALUES ARE INDICATED IN ohms UNLESS OTHERWISE SPECIFIED (k=1,000, M=1,000,000)
2. CAPACITANCE VALUES ARE SHOWN IN MICROFARADS UNLESS OTHERWISE NOTED (p=MICRO-MICRO FARADS).

CAUTION:
SAFETY PRECAUTION TO BE FOLLOWED DURING SERVICING.
1. SINCE THOSE PARTS MARKED WITH ⚠ ARE CRITICAL PARTS FOR SAFETY. USE ONLY THE ONE DESCRIBED IN THE PARTS LIST.
2. BEFORE RETURNING THE RECEIVER TO THE CUSTOMER, MAKE APPROPRIATE LEAKAGE CURRENT OR RESISTANCE MEASUREMENTS TO DETERMINE THAT EXPOSED PARTS ARE PROPERLY INSULATED FROM THE SUPPLY CIRCUIT.